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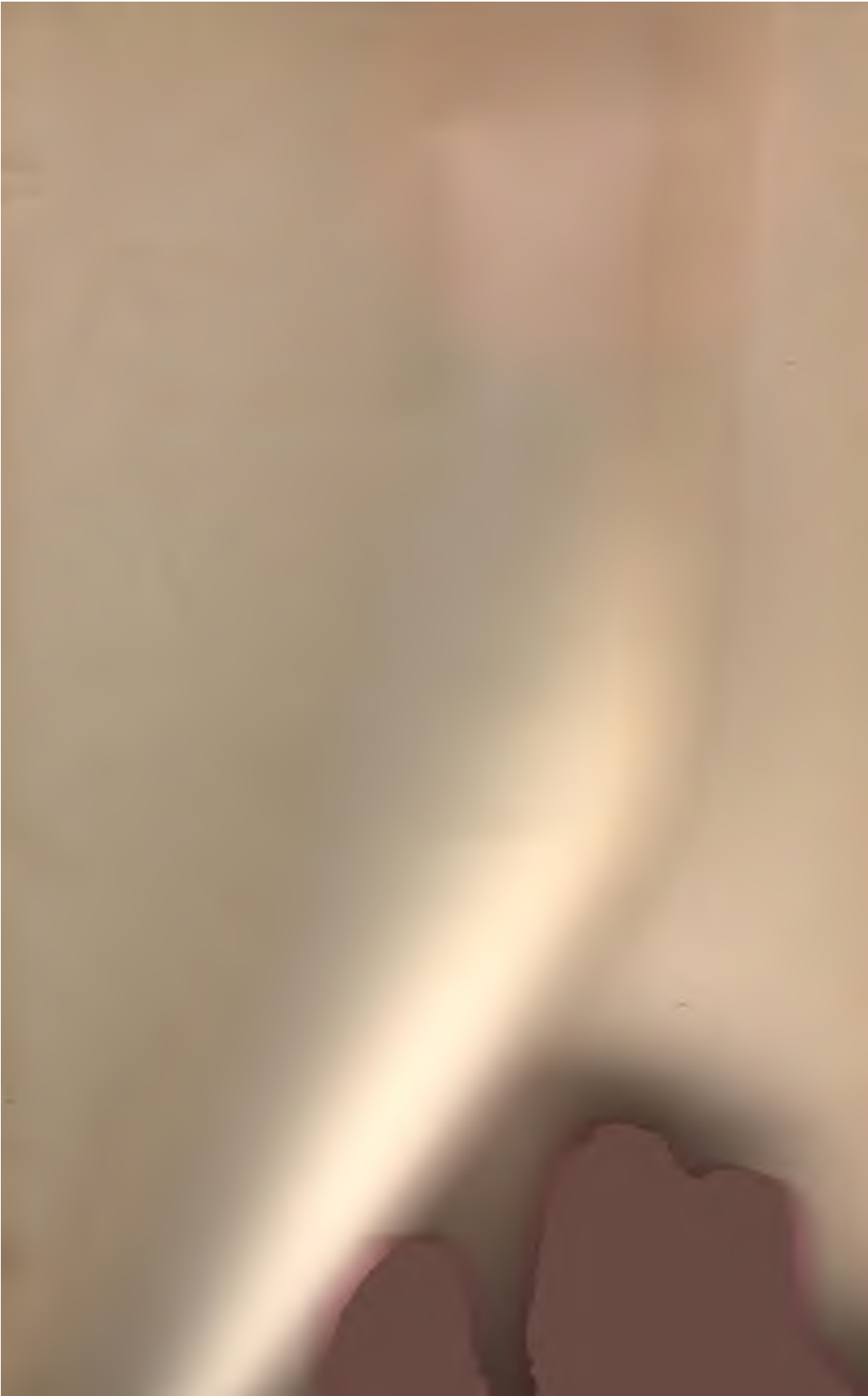
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March, 1898.



THIRTEENTH ANNUAL REPORT
RELATING TO THE REGISTRY AND RETURN OF
BIRTHS, MARRIAGES, AND DEATHS,
IN
MICHIGAN FOR THE YEAR 1879.

BY THE
SECRETARY OF STATE
OF THE
STATE OF MICHIGAN.



BY AUTHORITY.

LANSING, MICH.:
W. S. GEORGE & CO., STATE PRINTERS AND BINDERS.
1884.

Y&A&B&C&D&E

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MICHIGAN
DEPARTMENT OF STATE, }
OFFICE OF THE SECRETARY,
LANSING, April, 1884.

HON. JOSIAH W. BEGOLE, *Governor of Michigan*:

SIR,—I have the honor to submit herewith the Thirteenth Annual Report of the Department of State concerning Births, Marriages, and Deaths, relating to those returned for the year 1879.

The work of preparing the various tables and exhibits contained in this Report has been performed in this office under careful supervision, and as rapidly as accuracy would permit. The data contained in the present volume are believed to more accurately represent the conditions for a single year, relating to the social questions herein considered, than those contained in any previous Report. It has been aptly said: "One of the impediments to sociological generalizations is the uncertainty of our data." As the importance of collecting truthful particulars for the purpose of sociological study becomes more generally recognized, the more complete will they be, and the more perfect their enumeration. Therefore, in the collection of such statistical material from which to generalize for the public good, it is evident that it would be best performed by individuals who truly comprehend its nature, yet having minds unbiased in regard to results most desirable to be obtained, remembering that the perfectness of the whole is dependent upon the perfectness of its units.

Extended labor and study under the present law relating to the Vital Statistics of Michigan has led to the unfolding of many of its imperfections, and it is earnestly hoped that some succeeding Legislature will deem it advisable, in some manner to remedy these defects, or to construct entirely a new system of registration.

The continued material and social prosperity of Michigan in 1879 is indicated by the number of births and marriages in that year, as shown in the present Report, making due allowance for a probable increase in population from every cause. The number of births returned for 1879, was 34,122, and the number of marriages for the same year was 13,225. The number of marriages in each month of the year is graphically shown on page 75, where it will be seen that the number for every month was considerably more than the average deduced from statistics for the same months for a period of ten years. Exhibit B, on page x., shows that in 1879

there were more marriages to a given number of inhabitants than in any year from 1872 to 1879, inclusive, with the exception of the years 1873 and 1874. The number of deaths returned as having occurred in Michigan in 1879 was 14,407. The death-rate was somewhat greater in 1879 than in the preceding year. This unfortunate representation may be owing to the fact that the number of inhabitants, upon which the comparison is based, is that given by the State Census of 1874, with no allowance made for increase in population. Again, the greater prevalence of diphtheria that year largely increased the aggregate number of deaths in Michigan.

This volume is submitted with the sincere hope that it may prove a useful contribution to the general fund of information respecting the vital statistics of the human race.

Very respectfully,

A large, elegant handwritten signature in cursive script, reading "Henry A. Conrad". The signature is written in dark ink and features a long, sweeping horizontal flourish at the bottom.

Secretary of State.

BIRTHS, MARRIAGES, AND DEATHS,

IN MICHIGAN,

DURING THE YEAR 1879.

In Exhibit A may be studied the relation between the births, marriages, and deaths in Michigan as returned for each of the years 1872-1879. The number of marriages returned for the year 1879 exceeds the number returned for any of the other years shown in the exhibit, but the natural increase of population, as shown by the excess of births over deaths as returned, was less in 1879 than in any of the other years, with the exception of the years 1872 and 1874. If, however, the number of births and deaths as corrected for omissions in the enumeration be used, the natural increase of population is shown to be greater in 1879 than in any of the other years, except 1874, 1877, and 1878.

The average excess of births over deaths, as returned for the eight years 1872-1879, is 19,730, and the excess for the year 1879 was 19,715; it will therefore be seen that the year 1879 was about an average year, as regards the natural increase of population, according to the returns of births and deaths. The average annual increase of population for the eight years, 1872-1879, as shown by Exhibit A, was 1.21 per cent. of the population in 1880, according to the returns of births and deaths, and 1.78 per cent. of the population in 1880 if the births and deaths are corrected for omissions in the enumeration.

EXHIBIT A.—*Births, Marriages, and Deaths in Michigan during the Years 1874 to 1879, inclusive, including those in unknown month, and Excess of Births over Deaths, as Returned, and after they have been Corrected for Omissions in the Enumeration.*

		1874.	1875.	1876.	1877.	1878.	1879.
As Returned.	{ Marriages.....*	12,255	11,818	11,846	11,789	12,695	13,225
	{ Births.....	31,151	31,958	34,235	33,395	35,162	34,122
	{ Deaths.....	12,500	11,990	12,576	12,919	12,766	14,407
	{ Excess of Births over Deaths....	18,651	19,968	21,659	20,476	22,396	19,715
As Cor- rected for Omissions.	{ Births.....	55,841	46,553	45,172	50,203	52,145	50,100
	{ Deaths.....	20,090	17,289	18,389	18,341	18,866	20,583
	{ Excess of Births over Deaths....	35,751	29,264	26,783	31,862	33,279	29,517

* Corrected, for additional returns, up to January 15, 1881.

EXHIBIT B.—*Statements concerning Births, Marriages, and Deaths in Michigan during the Years 1874-1879, inclusive. (According to the Returns of Births, Marriages, or Deaths, as the case may be, except some correction is mentioned.)*

	1874. ^a	1875. ^b	1876. ^b	1877. ^b	1878. ^b	1879. ^b
Inhabitants represented by returns of marriages to one marriage ^c	96.64	112.72	112.51	113.00	105.08	100.86
In population represented by marriages, males to one marriage.....	50.45	58.91	58.79	59.05	54.92	52.71
In population represented by marriages, females to one marriage.....	46.19	53.81	53.72	53.95	50.17	48.15
Inhabitants represented by births to each child returned.....	37.89	41.52	38.56	39.82	37.78	38.76
Inhabitants, males to each male child returned....	37.84	41.98	38.86	40.33	38.09	38.90
Inhabitants, females to each female child returned	38.08	41.24	38.38	39.42	37.60	38.71
Inhabitants represented by deaths to one death...	93.77	110.25	104.74	102.28	103.32	91.49
Inhabitants, males to one death of male.....	91.76	107.09	101.84	101.08	103.83	91.53
Inhabitants, females to one death of female.....	96.59	115.14	109.21	104.51	103.64	91.95
Deaths, males to 100 females.....	114.83	117.58	117.27	113.03	109.04	109.84
Births, males to 100 females.....	109.88	107.43	108.05	106.94	108.02	108.83
Total population of State, males to 100 females....	109.22	109.47	109.47	109.47	109.47	109.47
Births to one death.....	2.49	2.67	2.72	2.58	2.75	2.37
Births, males to one death of male.....	2.44	2.56	2.63	2.52	2.75	2.36
Births, females to one death of female.....	2.55	2.80	2.85	2.67	2.77	2.38
Children born of which the sex was unknown or not stated.....	49.00	82.00	56.00	59.00	67.00	48.00
Decedents of which the sex was unknown or not stated.....	31.00	58.00	59.00	52.00	52.00	37.00
Natural daily increase of population, as per births and deaths returned.....	51.10	54.71	59.34	56.10	61.35	54.01
Natural daily increase of population, when returns are corrected as in 4th line of exhibit A, page 6, and exhibit C, page, 110.....	97.95	80.17	73.38	87.29	91.17	80.95

^a In computing statements for this column, the inhabitants, June 1, 1870, were used.

^b In computing statements for this column, the inhabitants in 1874 were used.

^c Marriages, corrected for additional returns up to January 15, 1881.

Various relations may be studied in Exhibit B,—relations between births, marriages, deaths, and inhabitants during each of the years 1874-1879. In the computations for the year 1874 the population in 1870 was used, and in the statements for the years 1875-1879 the population in 1874 was used, and it will be seen that the number of inhabitants to one marriage decreases from 1874 to 1879, with the single exception of the year 1877. The relation between the inhabitants and the births and the deaths is less uniform than between the inhabitants and the marriages.

In each year shown in the exhibit the number of males to one hundred females is much greater among decedents than among children born, the annual average for the eight years, 1872-1879, being: decedents, 114.28; children born, 108.04. In 1878 and in 1879, however, the difference is small, being 1.02 in 1878 and 1.01 in 1879. It is gratifying to note that among the births returned the number whose sex was not stated was less in 1879 than in any of the previous years.

Table I. contains data concerning births, marriages, and deaths in this State during the year 1879, by certain specified periods of time. It shows the average number per quarter, per month, per week, and per day, and the natural increase of population for each of those periods of time. The natural daily increase of population in 1879, as shown by this table, was 54.01, as per births and deaths returned, and 80.95 if the births and deaths are corrected for omissions in the enumeration.

TABLE I.—*The number of Marriages, Births, and Deaths, and Excess of Births over Deaths in the State of Michigan during the Year 1879, and the Average Number and Excess during Specified Periods of Time within the Year 1879, as Returned, and the same for Births and Deaths as Corrected for Omissions in the Enumeration.*

PERIODS OF TIME,—1879.		Marriages, 1879.	Births, 1879.	Deaths, 1879.	Excess of Births over Deaths.
As Returned.	Year, 1879 ^a	13,225.00	34,122.00	14,407.00	19,715.00
	Quarter.....	3,306.25	8,530.50	3,601.75	4,928.75
	Month.....	1,102.08	2,843.50	1,200.58	1,642.92
	Week.....	254.33	656.19	277.06	379.13
	Day.....	36.23	93.48	39.47	54.01
Births and Deaths as Corrected. ^b	Year, 1879 ^a		50,130.00	20,583.00	29,547.00
	Quarter.....		12,532.50	5,145.75	7,386.75
	Month.....		4,177.50	1,715.25	2,462.25
	Week.....		964.04	395.83	568.21
	Day.....		137.34	56.39	80.95

^a Unknown month included.

^b Corrected as if enumerated in months of occurrence.

Exhibit 1 is published to show the number of births, the number of deaths, and the excess of births over deaths for each of the years 1874–1879, by months, and the averages of excess for eight years. The year 1879 seems to have been about an average year as regards the natural increase of population, the average excess of births over deaths for eight years ending with 1879 being 19,721, and the excess for the year 1879 being 19,726. The month of December shows the largest average excess of births over deaths, and the month of February the smallest.

VITAL STATISTICS OF MICHIGAN, 1879.

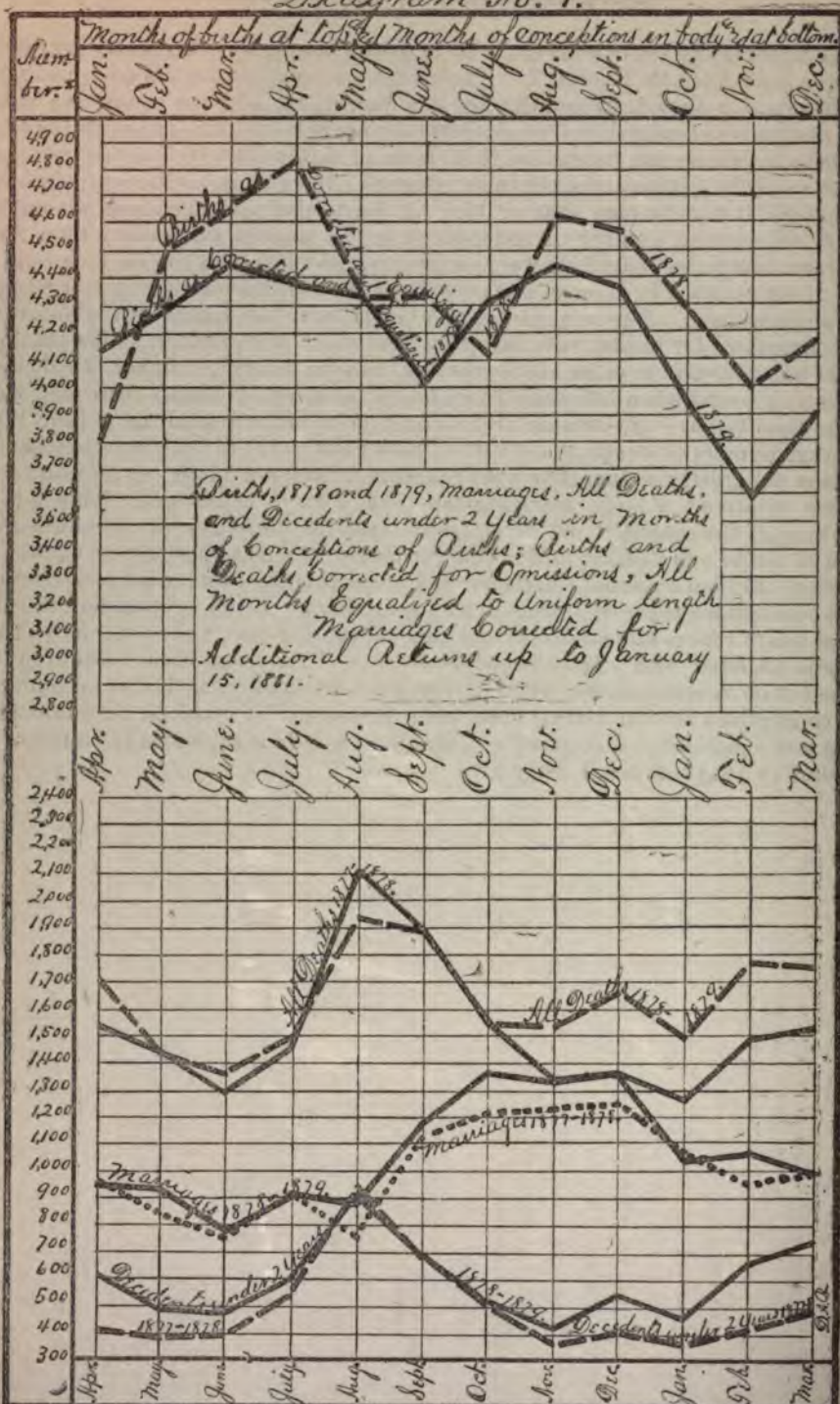
EXHIBIT 1.—By Months, the Births, Deaths, and Excess of Births over Deaths in Michigan during each of the Years 1874 to 1879, inclusive according to the Returns.

	TOTAL. ^a	MONTHS.											
		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1874.....	31,106	1,869	1,954	2,462	2,464	2,586	2,558	2,761	3,077	2,972	2,726	2,726	2,921
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1875.....	19,652	1,244	1,282	1,543	1,362	1,515	1,692	1,796	1,689	1,455	1,515	1,738	1,801
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1876.....	31,808	2,089	2,121	2,415	2,710	2,722	2,530	2,725	3,103	3,061	2,819	2,727	2,856
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1877.....	19,979	1,353	1,223	1,370	1,707	1,700	1,722	1,832	1,881	1,862	1,739	1,799	1,791
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1878.....	34,131	2,253	2,332	2,744	2,730	2,870	2,739	3,014	3,124	3,110	3,039	2,921	3,205
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	12,545	685	800	975	978	970	855	1,079	1,507	1,423	1,131	989	1,153
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	21,586	1,598	1,532	1,769	1,752	1,900	1,884	1,935	1,617	1,687	1,908	1,932	2,032
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	33,324	2,212	2,246	2,690	2,655	2,683	2,657	2,899	3,227	3,048	3,015	2,847	3,145
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	12,863	766	843	990	978	976	875	1,040	1,559	1,400	1,221	1,060	1,155
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	20,461	1,446	1,403	1,700	1,677	1,707	1,782	1,839	1,668	1,648	1,794	1,787	1,990
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	35,130	2,201	2,414	2,836	2,937	2,805	2,797	2,835	3,295	3,260	3,266	3,061	3,423
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	12,742	730	789	930	1,029	923	870	1,017	1,371	1,343	1,190	1,181	1,369
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	22,388	1,471	1,625	1,906	1,808	1,882	1,927	1,818	1,924	1,917	2,076	1,889	2,054
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	34,092	2,429	2,331	2,758	2,706	2,842	2,626	3,018	3,198	3,149	3,036	2,766	3,233
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	14,366	903	992	1,114	1,174	1,083	962	1,183	1,537	1,403	1,286	1,268	1,521
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
1879.....	19,726	1,556	1,339	1,644	1,532	1,769	1,724	1,835	1,661	1,746	1,750	1,458	1,712
{ Births.....													
{ Deaths.....													
{ Excess of births.....													
Monthly averages of excess for 1872 to 1879, inclusive	19,721	1,383	1,339	1,598	1,574	1,680	1,716	1,772	1,665	1,668	1,725	1,738	1,894

^a Unknown month excluded.

An opportunity for careful study of relations between births, marriages, and deaths is afforded by Exhibit 2. The births, as equalized and as corrected for omissions, are shown, by months, for the year 1879, and the marriages and the deaths, as equalized and as corrected for omissions, etc., are shown for the months in which the births in 1879 were probably conceived—nine months prior to birth. Comparing births as returned and equalized with marriages as equalized, it may be seen that in nine of the twelve months there was more than the average number of conceptions in the months when more than the average number of marriages were solemnized, and less than the average number of conceptions in months when less than the average number of marriages were solemnized. A comparison of the births with the deaths in the months of conceptions for births, both being as returned and equalized, shows that in eight out of twelve months there was less than the average number of conceptions in months when less than the average number of deaths occurred, and more than the average number of conceptions in months when more than the average number of deaths occurred. These facts point to both marriages and deaths as greatly influencing the conception-rate,—a large conception-rate seems to attend a large marriage-rate and a large death-rate. This is the showing of the exhibit if no correction is made for omissions in the enumeration of births and deaths; but if this correction is made, there seems to be no decided relation between marriages and conceptions, whereas between deaths and conceptions there is strong evidence in favor of the proposition that a *large* death-rate is attended with a *small* conception-rate, and a *small* death-rate is attended with a *large* conception-rate. This proposition holds true in nine out of twelve months, when births are compared with deaths in months of conceptions for the births, both being corrected for omission in enumerating and equalized to months of uniform length. This subject may be further studied in Diagram No. 1, page xiv.

Diagram No. 1.



* Scale = 700 to the inch.

Designed by Henry O. Baker

EXHIBIT 2.—*Births in Michigan, by Months, during the Year 1879, and Marriages and Deaths during the Months of Conception of same, showing the Births and Deaths as Returned, as Corrected for Omissions in Enumerating, and Equalized for Increase of Population during the Year,—all Months Equalized to Uniform length of 30.44 days.*

	Totals	MONTHS,—1879.												Av. Mo.
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Births, 1879, equalized to months of uniform length....	34,000	2,385	2,534	2,709	2,746	2,791	2,665	2,964	3,140	3,195	2,981	2,806	3,174	2,841.00
Births, 1879, corrected for omissions in enumerating, and equalized to months of uniform length.	50,135	4,137	4,279	4,448	4,384	4,327	4,010	4,323	4,437	4,368	3,939	3,580	3,903	4,178.00
		MONTHS,—1878.										1879.		Av. Mo.
		Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	
Marriages, ^b equalized to months of uniform length....	12,361	940	905	769	891	854	1,146	1,283	1,256	1,239	1,044	1,055	988	1,030.00
Deaths, equalized to months of uniform length.....	13,312	1,044	906	883	999	1,346	1,363	1,169	1,198	1,345	887	1,078	1,094	1,109.00
Deaths, corrected for omissions in enumerating, and equalized to months of uniform length.	19,586	1,701	1,433	1,353	1,482	1,932	1,890	1,564	1,546	1,669	1,495	1,771	1,750	1,632.00
Deaths, corrected and equalized, equalized to months of uniform length....	20,085	1,754	1,473	1,386	1,513	1,967	1,917	1,581	1,558	1,728	1,557	1,839	1,812	1,674.00

^a Excluding unknown month.

^b Corrected for additional returns up to Jan. 15, 1881.

EXHIBIT D.—*Grouping the Evidence of the Vital Statistics on the subject of the Comparative Natural Increase of Native and of Foreign-born Inhabitants of Michigan, by Excess of Births over Deaths, according to the Returns, the Evidence Exhibited Covering the Years 1874 to 1879, inclusive.*

BIRTHS, DEATHS, AND EXCESS OF BIRTHS OVER DEATHS.	1874.			1875.			1876.			1877.			1878.			1879.		
	Total.	Both Parents of Child- dren Native-born.	Both Parents of Child- dren Foreign-born.	Total.	Both Parents of Child- dren Native-born.	Both Parents of Child- dren Foreign-born.	Total.	Both Parents of Child- dren Native-born.	Both Parents of Child- dren Foreign-born.	Total.	Both Parents of Child- dren Native-born.	Both Parents of Child- dren Foreign-born.	Total.	Both Parents of Child- dren Native-born.	Both Parents of Child- dren Foreign-born.	Total.	Both Parents of Child- dren Native-born.	Both Parents of Child- dren Foreign-born.
Births by parent nativity	a 31,151	13,341	10,517	a 31,908	14,226	11,120	a 34,225	15,551	11,901	a 33,393	15,270	11,557	a 35,162	16,323	11,992	a 34,122	15,864	11,369
Deaths, by nativ- ity	b 12,500	c 9,937	d 2,128	b 11,990	c 9,573	d 2,106	b 12,576	c 10,147	d 2,078	b 12,919	c 10,305	d 2,251	b 12,766	c 10,183	d 2,237	b 14,407	c 11,495	d 2,458
Excess of births over deaths...	18,651	3,404	8,389	19,968	4,653	9,014	21,659	5,404	9,823	20,476	4,965	9,306	22,396	6,140	9,755	10,715	4,369	8,911

a Includes children of mixed parentage and those where the nativity of one or both parents was unknown.

b Includes deaths of persons of unknown nativity.

c Includes all deaths of persons born in the United States*, whether born of native or of foreign-born parents.

d Includes only persons who were born in foreign countries.

EXHIBIT E.—*Showing, for the State and Counties of Michigan, the Number of Births and Deaths returned to this Department as having occurred out of Michigan during the year 1879.*

STATE AND COUNTIES.	1879.		COUNTIES.	1879.	
	Births.	Deaths.		Births.	Deaths.
STATE.....	334	73	Kent.....	9	2
Allegan.....	2	3	Lake.....	1	.....
Alpena.....	1	1	Lapeer.....	7	.....
Antrim.....	1	.....	Leelanaw.....	1	.....
Barry.....	4	1	Lenawee.....	7	3
Bay.....	11	1	Livingston.....	5	.....
Benzie.....	3	.....	Macomb.....	1	3
Berrien.....	13	1	Manistee.....	4	.....
Branch.....	6	2	Mason.....	2	.....
Calhoun.....	5	.....	Mecosta.....	6	1
Cass.....	6	.....	Menominee.....	1	.....
Charlevoix.....	1	.....	Midland.....	6	1
Delta.....	1	.....	Monroe.....	2	3
Eaton.....	8	4	Montcalm.....	5	1
Emmet.....	6	3	Muskegon.....	5	.....
Genesee.....	6	2	Newaygo.....	1	.....
Grand Traverse.....	6	.....	Oceana.....	3	1
Gratiot.....	7	.....	Osceola.....	6	.....
Hillsdale.....	.....	1	Saginaw.....	8	5
Houghton.....	7	2	Sanilac.....	13	3
Huron.....	9	.....	Shiawassee.....	5	.....
Ingham.....	3	.....	St. Clair.....	15	5
Ionia.....	6	1	St. Joseph.....	11	3
Iosco.....	1	.....	Tuscola.....	.....	1
Isabella.....	5	.....	Van Buren.....	3	.....
Jackson.....	3	3	Washtenaw.....	3	1
Kalamazoo.....	3	4	Wayne.....	73	11
Kalkaska.....	2	.....	Wexford.....	1	.....

TABLE II.—*Exhibiting, by Sex, the Population in 1874, the Number of Marriages, Births, and Deaths, and the Excess of Births over Deaths, in Michigan during the Year 1879, according to the Returns.*

STATE AND COUNTIES.	POPULATION, 1874.		Marriages, 1879.	BIRTHS, 1879.			DEATHS, 1879.			EXCESS OF BIRTHS OVER DEATHS. ^a			
	Total.	SEX.		Total.	SEX.		Total.	SEX.					
		Males.			Females.	Males.		Fe- males.	Un- known.	Males.	Fe- males.	Un- known.	
STATE.....	1,324,031	687,184	636,847	13,225	17,757	16,317	34,122	14,407	6,848	19,715	10,235	9,469	11
Alcona.....	1,214	688	526	10	27	30	57	27	16	30	11	19	.....
Allegan.....	32,381	16,976	15,405	315	447	400	848	322	173	526	274	251	1
Alpena.....	4,807	2,808	1,999	53	120	91	211	63	36	148	84	64	.....
Antrim.....	3,002	1,654	1,348	45	66	64	130	43	26	87	40	47	.....
Baraga.....	.....	.....	.....	9	30	23	53	20	13	33	17	16	.....
Barry.....	22,051	11,588	10,463	246	260	242	511	168	94	343	175	168	.....
Bay.....	24,832	13,657	11,175	150	514	446	960	363	176	537	338	250	.....
Benzie.....	2,663	1,422	1,241	31	61	53	115	32	20	83	41	42	.....
Berrien.....	35,029	17,942	17,087	486	319	284	603	344	187	250	132	127	.....
Branch.....	25,728	13,041	12,685	311	253	219	474	241	130	233	123	110	.....
Calhoun.....	35,655	18,156	17,499	330	255	250	515	220	153	219	102	117	.....
Cass.....	20,925	10,592	9,933	232	165	166	332	178	98	154	67	86	1
Charlevoix.....	2,860	1,280	1,060	34	70	95	174	40	19	134	60	74	.....
Cheboygan.....	3,070	1,706	1,364	41	88	86	175	42	23	133	65	67	1
Chippewa.....	2,170	1,222	948	10	75	65	140	52	24	88	51	38	-1
Clare.....	1,354	745	609	27	27	26	63	30	11	33	16	17	.....
Clinton.....	23,661	12,162	11,499	229	243	248	494	213	98	281	145	136	1
Crawford.....	.....	.....	.....	2	14	12	26	7	6	19	9	10	.....
Delta.....	4,741	2,882	1,859	60	59	74	133	30	16	103	43	60

BIRTHS, MARRIAGES, AND DEATHS.

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Eaton.....	26,907	13,875	13,032	275	667	362	302	3	312	153	189	355	209	143	5
Emmet..... ^f	1,272	669	603	38	150	80	70	-----	64	32	32	-----	86	48	38
Genesee.....	34,568	17,530	17,032	363	711	377	332	2	278	137	140	1	433	240	192
Gladwin..... ^g	205	145	120	3	16	5	11	-----	8	5	3	-----	8	-----	8
Grand Traverse.....	5,349	2,801	2,548	77	246	133	113	-----	60	26	34	-----	196	107	79
Gratiot.....	13,886	7,304	6,582	177	465	238	227	-----	170	100	70	-----	295	138	157
Hillsdale.....	31,566	15,971	15,595	380	524	269	253	2	251	112	136	3	273	157	117
Houghton.....	19,030	11,012	8,017	170	884	480	404	-----	224	122	102	-----	690	358	302
Huron.....	11,964	6,614	5,350	138	510	260	250	-----	99	57	42	-----	411	203	208
Ingham..... ^h	29,193	15,204	13,980	326	579	278	301	-----	288	135	133	-----	291	123	168
Ionia.....	28,376	14,788	13,588	320	590	301	289	-----	206	108	98	-----	384	193	191
Iosco..... ⁱ	4,575	2,706	1,809	48	121	59	62	-----	58	34	24	-----	63	25	38
Isabella.....	6,069	3,273	2,786	70	308	166	141	1	98	48	48	2	210	118	93
Isle Royal.....	4	4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Jackson.....	37,938	19,833	18,135	380	729	373	356	-----	337	168	169	-----	392	205	187
Kalamazoo.....	32,284	16,583	15,701	250	613	287	322	4	365	178	184	3	248	109	138
Kalkaska..... ^j	1,259	692	667	16	63	29	34	-----	17	6	11	-----	46	23	23
Kent.....	62,671	32,576	30,065	632	1,605	845	760	-----	796	428	368	-----	800	417	392
Keweenaw..... ^k	5,411	3,233	2,178	7	183	104	79	-----	49	30	19	-----	134	74	60
Lake.....	1,813	1,015	708	24	48	24	24	-----	16	8	8	-----	32	16	16

^a The figures with the minus sign placed before them indicate the excess of deaths over births.^b No returns of deaths from the township of New Buffalo.^c No returns of births nor deaths from the township of Ontwa.^d No returns of births nor deaths from the township of Detroit.^e No returns of births nor deaths from the townships of Baldwin and Maple Ridge, and no returns of deaths from the township of Masonville.^f No returns of births nor deaths from the township of Maple River.^g No returns of deaths from the township of Billings.^h No returns of deaths from the township of Leroy.ⁱ No returns of births nor deaths from the townships of Sherman, Thompson, and Wilber.^j No returns of deaths from the township of Boardman.^k No returns of births from the townships of Eagle Harbor and Sherman.

TABLE II.—CONTINUED.

COUNTIES.	POPULATION, 1874.			Marriages, 1879.	BIRTHS, 1879.				DEATHS, 1879.				EXCESS OF BIRTHS OVER DEATHS.			
	Total.	SEX.			Total.	SEX.			Total.	SEX.			Total.	SEX.		
		Males.	Females.			Males.	Fe- males.	Un- known.		Males.	Fe- males.	Un- known.		Males.	Fe- males.	Un- known.
Lapeer...	25,140	13,085	12,045	258	602	309	291	2	351	121	129	1	351	188	163	1
Leelanaw	5,031	2,692	2,339	33	160	81	79	.....	41	17	24	.....	119	64	55	.....
Leenawee	46,084	23,256	22,828	425	681	350	330	1	392	209	183	1	289	141	148	.....
Livingston	20,329	10,569	9,760	146	428	231	197	.....	176	84	92	.....	253	147	105	.....
Mackinac	1,408	765	731	18	25	11	14	.....	22	10	12	.....	3	1	2	.....
Macomb	28,305	14,367	13,938	229	601	296	305	.....	308	158	150	.....	293	138	155	.....
Manistee	8,471	4,792	3,679	85	308	214	183	1	119	71	47	1	279	143	136	.....
Manitou	637	364	293	5	25	13	12	.....	6	3	3	.....	19	10	9	.....
Marquette	21,946	12,893	9,053	120	770	398	372	.....	217	127	90	.....	553	271	282	.....
Mason	5,331	2,971	2,390	86	219	119	98	2	87	55	32	.....	132	64	66	2
Mecosta	9,132	4,874	4,258	103	327	171	156	.....	141	70	71	.....	186	101	85	.....
Menominee	3,490	2,213	1,277	53	87	41	46	.....	26	15	11	.....	61	26	35	.....
Midland	4,763	2,593	2,172	43	145	68	77	.....	64	33	31	.....	81	35	46	.....
Missaukee	606	335	211	2	29	16	13	.....	17	8	9	.....	12	8	4	.....
Monroe	30,111	15,302	14,809	366	812	459	351	2	333	187	143	3	479	272	208	-1
Montcalm	20,815	11,311	9,504	244	622	335	283	4	204	110	91	3	418	225	192	-1
Muskegon	19,375	10,761	8,614	203	485	253	231	1	214	119	94	- 1	271	134	137	.....
Newaygo	8,758	4,879	3,879	103	253	137	121	.....	101	53	49	.....	157	84	73	.....
Oakland	38,083	19,446	18,636	304	591	301	290	.....	356	185	171	.....	235	116	119	.....
Oscoda	8,390	4,561	3,779	85	283	144	139	97	53	44	166	91	95
Ogemaw	207	153	54	11	4	7	5	1	4	6	3	3

BIRTHS, MARRIAGES, AND DEATHS.

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Ontonagon.....	2,406	1,276	1,130	9	67	33	33	1	29	16	13	88	17	20	1
Oscoda.....	6,216	3,461	2,725	94	280	130	130	96	51	45	154	79	75
Otsego..... ^b	238	162	76	7	25	12	13	.....	10	5	5	.....	15	7	8	.....
Ottawa.....	29,929	15,780	14,140	244	851	464	387	.....	318	155	163	.....	533	309	224	.....
Presque Isle..... ⁱ	1,615	851	764	4	99	43	51	.....	19	15	4	.....	80	33	47	.....
Roscommon..... ^j	276	187	89	17	7	6	1	.....	7	5	2	.....	.....	1	-1	.....
Saginaw.....	48,469	25,968	22,441	450	1,330	671	655	4	702	362	336	4	628	369	319	.....
Sanilac..... ^k	16,292	8,652	7,640	147	701	365	336	.....	199	103	96	.....	502	262	240	.....
Schoolcraft..... ^k	1,200	824	466	7	4	1	3	.....	3	2	1	.....	1	-1	2	.....
Shiawassee.....	21,773	11,255	10,508	154	429	205	221	3	165	86	77	2	264	119	144	1
St. Clair.....	40,688	21,181	19,507	384	1,044	547	495	2	368	206	161	1	676	341	334	1
St. Joseph.....	25,906	13,267	12,639	277	445	241	203	1	255	115	138	2	190	126	65	-1
Tuscola.....	16,368	8,950	8,048	212	590	330	260	.....	228	120	108	.....	362	219	152	.....
Van Buren.....	29,156	15,062	14,094	246	538	277	261	.....	247	120	127	.....	291	157	134	.....
Washtenaw..... ^l	38,723	19,553	19,170	319	699	310	269	.....	359	187	172	.....	260	123	127	.....
Wayne.....	144,903	72,306	72,597	1,308	4,378	2,307	2,070	1	1,651	1,027	923	1	2,427	1,280	1,147	.....
Wexford..... ^m	3,011	1,752	1,250	61	170	78	91	1	67	33	33	1	103	45	58	.....

^a The figures with the minus sign placed before them indicate the excess of deaths over births.

^b No returns of births nor deaths from the townships of Holmes and St. Ignace.

^c No returns of deaths from the township of Gailliee.

^d No returns of deaths from the township of Martiny.

^e No returns of deaths from the township of Menominee.

^f No returns of births nor deaths from the township of Pine.

^g No returns of births nor deaths from the townships of Montague and Norion, and no returns of births from the township of Moorland.

^h No returns of births nor deaths from the township of Dover, and no returns of deaths from the township of Hayes.

ⁱ No returns of births nor deaths from the township of Bismarck, and no returns of deaths from the townships of Metz and Presque Isle.

^j No returns of deaths from the townships of Gerrish and Nester.

^k No returns of births nor deaths from the townships of Munising and Onota, and no returns of births from the township of Manistique.

^l No returns of births nor deaths from the townships of Salem and Sylvan.

^m No returns of births nor deaths from the township of Concord.

BIRTHS, 1879.

According to the returns of the county clerks to the State Department, there were 34,122 children born in the State of Michigan during the year ending December 31, 1879. This is a larger number than has been returned to this Department for any previous year, with only three exceptions—1873, 1876, 1878—and is much larger than the average for the past twelve years. The annual average number of births returned for the twelve years 1868–1879 is 30,616, which is 3,506 less than the number returned for the year 1879. Further comparisons of the various years may be made by reference to Table I., following.

It is thought that these statistics of births do not represent the number of children actually born in Michigan, in consequence of the delay in collecting these statistics made necessary by our registration law. From five to sixteen months' time passes after the births occur before the enumeration of them is made, during which time many removals and deaths may take place; other causes also probably operate to lead the enumerator to miss many of the older children who have been born during this time. In consequence of these probable omissions in the enumeration of the births, a correction has been made, which amounts in 1879 to 46.91 per cent. of the births returned. The following tabular exhibit shows, according to estimations by the compiler, the per cent. of births returned, and the per cent. of births added as a correction for the omissions in the enumeration. In 1879, only 68.05 per cent. of the births were returned, according to this exhibit, and the average for the nine years 1871–1879 was 68.19 per cent. The year 1879 was nearer an average year than any of the other years included in the exhibit.

YEARS.	Per Cent. of Births Returned.	Per Cent. of Births Added as Correction for Omissions.
1871.....	70.00	42.86
1872.....	64.95	43.95
1873.....	76.72	30.34
1874.....	55.75	79.37
1875.....	68.61	45.76
1876.....	75.73	32.04
1877.....	66.47	50.44
1878.....	67.41	48.34
1879.....	68.05	46.91
Average for 9 years..	68.19	46.67

VITAL STATISTICS OF MICHIGAN, 1879.

It is to be regretted that our State registration law necessitates this correction, by fixing the time for the enumeration so long after the children are born.

The number of births for certain periods of time during the year 1879 is shown in the following tabular exhibit:

PERIODS OF TIME.	Births as Returned.	Corrected as per Exhibit A, 4th line.	Corrected with 46.67 Per Cent.
Per quarter.....	8,530.50	12,536.00	12,511.50
Per month.....	2,843.50	4,178.67	4,170.50
Per week.....	656.19	964.31	962.42
Per day.....	93.48	137.33	137.11

The number of inhabitants of Michigan in 1874, the number of births in 1879 as returned and as corrected for omissions, and the relation of inhabitants to births are shown in the following exhibit:

SEX.	Inhabitants in 1874 Represented by Births in 1879.	Births as Returned.	Births Corrected for Omissions in Enumerating.	PER CENT. OF BIRTHS TO INHABITANTS.	
				Births as Returned.	Births Corrected for Omissions.
Total.....	1,322,430	34,122	50,085	2.58	3.79
Males.....	690,818	17,757	26,861	2.57	3.89
Females.....	631,612	16,317	23,224	2.58	3.68
Unknown.....	.....	48	.....	.....	.....

The number and per cent. of total number of births, by quarters of the year are shown in Table I., for each of the years 1874-1879, as returned and as corrected for omissions in the enumeration. In 1879, in births as returned, the greatest proportion is shown for the quarter ending with September, the smallest for the quarter ending with March. This is true of each year included in the table, with the single exception of the year 1878, when the greatest proportion was in the last quarter of the year. If the births as corrected be used, as is done in the lower part of the table, it is still found that the largest proportion is shown for the third quarter of the year in each of the years 1874-1879, excepting only 1878; but aside from this correspondence, there is a more uniform distribution of the births throughout the year. Taking the births as returned, considerably more than half of the children born in each of the years 1872-1879 were born during the last two quarters of the year; but using as evidence the births as corrected for omissions, it is seen that in six out of the eight years 1872-1879, less than half of the births occurred during the last two quarters of the year. The average proportion of births as returned for the years 1872-1879 as having occurred during the last half of the year is 54.52 per cent.; but if we use the births as corrected only 50.04 per cent. is shown as the average proportion of births occurring during the last half of the year. The correction, therefore, has the effect of distributing the births more evenly throughout the year.

TABLE I.—*Births by Quarters of the year, Exhibiting the Number and Per Cent. of Totals for the Years 1874 to 1879, inclusive, as Returned, and as Corrected for Omissions in the Enumeration.*

TOTALS, AND MONTHS WITH WHICH QUARTERS END.		1874.		1875.		1876.		1877.		1878.		1879.	
		Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.
As Returned.	Totals....	31,151	100.00	31,958	100.00	34,235	100.00	33,395	100.00	35,162	100.00	34,122	100.00
	March....	6,315	20.27	6,625	20.73	7,379	21.55	7,148	21.40	7,451	21.19	7,518	22.03
	June.....	7,608	24.42	7,962	24.91	8,339	24.36	7,995	23.94	8,539	24.28	8,174	23.96
	Sept.....	8,810	28.28	8,909	27.88	9,248	27.01	9,174	27.47	9,390	26.70	9,365	27.45
	Dec.....	8,373	26.88	8,402	26.29	9,165	26.77	9,007	26.97	9,750	27.73	9,035	26.47
	Unknown	45	.14	60	.19	104	.30	71	.21	32	.09	30	.09
	Average..	7,788	25.00	7,990	25.00	8,559	25.00	8,349	25.00	8,791	25.00	8,531	25.00
As Corrected for Omissions.	Totals....	55,841	100.00	46,553	100.00	45,172	100.00	50,203	100.00	52,145	100.00	50,130	100.00
	March....	13,707	24.55	11,074	23.79	10,840	24.00	12,446	24.79	12,742	24.44	12,679	25.29
	June.....	14,768	26.45	12,261	26.34	11,480	25.41	12,748	25.39	13,435	25.76	12,680	25.29
	Sept.....	15,019	26.90	12,494	26.84	11,858	26.25	13,258	26.41	13,402	25.70	13,227	26.39
	Dec.....	12,302	22.03	10,664	22.91	10,890	24.11	11,680	23.27	12,534	24.04	11,514	22.97
	Unknown	45	.08	60	.13	104	.23	71	.14	32	.06	30	.06
	Average..	13,960	25.00	11,638	25.00	11,293	25.00	12,551	25.00	13,036	25.00	12,533	25.00

* The number in unknown quarter of year included.

A comparison of the months as regards the number of children returned as having been born is facilitated by the arrangement in Table II., which table shows the number and per cent. of births in each month of each of the years 1874-1879, the months having the greatest number of births being placed first in the columns. In three of the six years, August heads the list, and in three December shows the largest number of births. The three months of August, September, and December are the first three months in the list for each of the years 1872-1879, with the exception of the year 1878, when October takes the place of September. The uniform showing of this table is that a little more than twenty-eight per cent. (28.45) of the births for each year were returned for the three months of August, September, and December. This table also shows that the two months of January and February are the last in order of greatest number first, uniformly indicating that the smallest number of births are returned for these first two months of the year.

But it should be borne in mind that probably a larger proportion of the births which actually occurred were returned for the later than for the earlier months of the year, as was explained on page 2 of this Report. If the births are corrected so as to include the probable omissions in the enumeration, as is done in Exhibit 2, following, the order of the months will be different, and the uniformity shown in Table II. destroyed.

VITAL STATISTICS OF MICHIGAN, 1879.

TABLE II.—Births during the Years 1874—1879, inclusive, according to the Returns, exhibiting the Number and Per Cent. of Total, by Months, arranged in Order by Number, Months having the greatest number first.

	1874.			1875.			1876.			1877.			1878.			1879.		
	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.
1	Total..	31,151	100.00	Total..	31,938	100.00	Total..	34,235	100.00	Total..	33,395	100.00	Total..	35,163	100.00	Total..	34,132	100.00
2	Aug. ..	3,077	9.88	Aug.	3,103	9.71	Dec. ...	3,305	9.36	Aug. ...	3,237	9.66	Dec. ...	3,423	9.73	Dec. ...	3,233	9.47
3	Sept. ...	2,972	9.54	Sept. ...	3,081	9.64	Aug. ...	3,124	9.13	Dec. ...	3,145	9.43	Aug. ...	3,295	9.37	Aug. ...	3,198	9.37
4	Dec.	2,921	9.38	Dec.	2,836	8.94	Sept. ...	3,110	9.08	Sept. ...	3,048	9.13	Oct. ...	3,266	9.29	Sept. ...	3,149	9.23
5	July.	2,761	8.86	Oct.	2,819	8.82	Oct.	3,033	8.88	Oct.	3,015	9.03	Sept. ...	3,290	9.37	Oct.	3,036	8.90
6	Oct.	2,726	8.75	Nov.	2,727	8.53	July.	3,014	8.80	July.	2,899	8.68	Nov.	3,061	8.71	July.	3,018	8.84
7	Nov.	2,725	8.75	July.	2,725	8.53	Nov.	2,921	8.53	Nov.	2,847	8.53	April. ...	2,937	8.35	May. ...	2,842	8.33
8	May.	2,686	8.60	May.	2,722	8.52	May.	2,870	8.38	Mar.	2,680	8.06	Mar.	2,836	8.07	Nov.	2,766	8.11
9	June.	2,558	8.21	April. ...	2,710	8.48	Mar.	2,744	8.01	May.	2,683	8.03	July.	2,835	8.06	Mar.	2,758	8.08
10	April. ...	2,464	7.91	June.	2,630	7.91	June.	2,739	8.00	June.	2,637	7.96	May.	2,805	7.96	April. ...	2,706	7.93
11	Mar.	2,462	7.90	Mar.	2,415	7.56	April. ...	2,730	7.97	April. ...	2,655	7.95	June.	2,797	7.95	June.	2,636	7.70
12	Feb.	1,954	6.27	Feb.	2,121	6.64	Feb.	2,352	6.87	Feb.	2,246	6.73	June.	2,414	6.87	Jan.	2,429	7.13
13	Jan.	1,899	6.10	Jan.	2,069	6.53	Jan.	2,233	6.67	Jan.	2,213	6.62	Jan.	2,301	6.58	Feb.	2,331	6.83
	Unk.	45	.14	Unk.	60	.19	Unk.	104	.30	Unk.	71	.21	Unk.	82	.23	Unk.	30	.09
	Av. ^a	2,596	8.33	Av. ^a	2,663	8.33	Av. ^a	2,863	8.33	Av. ^a	2,768	8.33	Av. ^a	2,930	8.33	Av. ^a	2,844	8.33

^a Including unknown month.

BIRTHS BY MONTHS, CORRECTED FOR OMISSIONS.

5

EXHIBIT 2.—*Births during the Years 1876, 1877, 1878, and 1879, as Corrected for Omissions in the Enumeration, exhibiting the Number and Per Cent. of Total, by Months arranged in order by Number, Months having the greatest number first.*

ORDER.	1876.			1877.			1878.			1879.		
	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.
	Total....	45,172	100.00	Total....	50,203	100.00	Total....	52,145	100.00	Total....	50,180	100.00
1	Aug.....	4,007	8.87	Aug.....	4,666	9.29	April....	4,759	9.13	Mar.....	4,530	9.04
2	July.....	3,960	8.77	Mar.....	4,553	9.08	March....	4,730	9.07	Aug.....	4,519	9.01
3	May.....	3,951	8.75	April....	4,365	8.69	Aug.....	4,710	9.03	May.....	4,407	8.79
4	Mar.....	3,950	8.74	July.....	4,335	8.63	Sept....	4,504	8.64	July.....	4,403	8.78
5	Sept....	3,891	8.61	May.....	4,278	8.52	May.....	4,411	8.46	Apr.....	4,321	8.62
6	April....	3,844	8.51	Sept....	4,257	8.48	Oct.....	4,357	8.36	Sept....	4,305	8.59
7	Dec.....	3,708	8.21	June.....	4,105	8.18	June.....	4,265	8.18	Jan.....	4,213	8.40
8	Oct.....	3,707	8.21	Oct.....	4,061	8.09	Dec.....	4,240	8.13	Oct.....	4,011	8.00
9	June.....	3,685	8.16	Jan.....	3,965	7.90	July.....	4,188	8.03	Dec.....	3,975	7.93
10	Nov.....	3,475	7.69	Feb.....	3,925	7.82	Feb.....	4,131	7.92	June.....	3,952	7.88
11	Feb.....	3,460	7.66	Dec.....	3,925	7.82	Nov.....	3,937	7.55	Feb.....	3,936	7.85
12	Jan.....	3,430	7.59	Nov.....	3,694	7.36	Jan.....	3,881	7.44	Nov.....	3,523	7.04
	Unk.....	104	.23	Unk.....	71	.14	Unk.....	32	.06	Unk.....	30	.06
	Aver'ge a	3,764	8.33	Aver'ge a	4,184	8.33	Aver'ge a	4,345	8.33	Aver'ge a	4,178	8.33

a Including births in unknown month.

VITAL STATISTICS OF MICHIGAN, 1879.

EXHIBIT A.—*Births in Michigan during the Year 1879, as Returned, as Corrected for Omissions in the Enumeration; the same Equalized for Increase of Population during the Year covered by the Returns, and the Births as thus Corrected and Equalized for the several Months, Equalized for Months of a Uniform length of 30.44 days; also, indicating some of the steps by which these results have been reached. (Still-births and Children of unknown Sex included.)*

	TOTAL.	MONTHS, 1879.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Births as returned by Registration Officers.....	* 34,092	2,459	2,331	2,708	2,706	2,842	2,626	3,018	3,198	3,149	3,036	2,766	3,233
Per cent. of births to be added for correction for time elapsing before enumeration.....		73.44	68.85	64.28	52.67	55.08	50.49	45.90	41.31	36.72	32.13	27.54	22.95
Number of births to be added for above correction.....	16,003	1,784	1,605	1,772	1,615	1,565	1,326	1,386	1,321	1,158	975	762	742
Births, if enumerated in months of occurrence.....	50,100	4,213	3,936	4,530	4,321	4,407	3,952	4,403	4,519	4,305	4,011	3,528	3,975
Per cent. of births to be added to equalize them to population at close of year.....		4.21	3.96	3.51	3.16	2.91	2.46	2.11	1.76	1.41	1.06	.71	.35
Births to be added to equalize them to population at close of year.....	1,192	177	152	169	137	124	97	93	80	91	43	25	14
Births, as corrected, equalized to population at close of year.....	51,292	4,390	4,088	4,699	4,458	4,531	4,049	4,496	4,599	4,396	4,054	3,553	3,989
Days and hundredths by which the months should be increased or diminished to equalize them to months of uniform length.....		—56	+244	—56	+44	—56	+44	—56	—56	+44	—56	+44	—56
Number of births added or subtracted to equalize them to months of uniform length.....	+41	—79	+356	—83	+65	—92	+59	—81	—83	+64	—73	+52	—72
Births, corrected and equalized, equalized to months of uniform length....	51,333	4,311	4,444	4,604	4,523	4,449	4,108	4,415	4,516	4,400	3,981	3,605	3,917

* Excluding 80 in unknown month.

BIRTHS OF MALES, CORRECTED, BY MONTHS.

7

EXHIBIT B.—Births of Males in Michigan during the Year 1879, as Returned, as Corrected for Omissions in the Enumeration; the same Equalized for Increase of Population during the Year covered by the Returns, and the Births as thus Corrected and Equalized for the several Months, Equalized for Months of 30.44 Days each.

	MONTHS, 1879.											
	Jan.	Feb.	Mar.	April	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
TOTAL.												
Births of Males as returned by Registration officers.....	1,250	1,195	1,409	1,406	1,509	1,331	1,546	1,664	1,688	1,601	1,449	1,701
Per cent. of births to be added for correction for time elapsing before enumeration.....	80.44	75.41	70.38	65.35	60.32	55.29	50.26	45.23	40.20	35.17	30.14	25.11
Number of births to be added for above correction.....	1,008	901	992	919	910	786	777	753	678	563	436	427
Births of males, if enumerated in months of occurrence.....	2,258	2,096	2,401	2,325	2,419	2,067	2,323	2,417	2,364	2,164	1,884	2,128
Per cent. of births to be added to equalize them to population at close of year.....	4.21	3.86	3.51	3.16	2.81	2.46	2.11	1.76	1.41	1.06	.71	.35
Births to be added to equalize them to population at close of year.....	600	81	84	73	48	51	49	43	33	23	13	7
Births of males, as corrected, equalized to population at close of year.....	2,351	2,177	2,485	2,398	2,467	2,118	2,372	2,460	2,397	2,187	1,897	2,135
Days and hundredths by which the months should be increased or diminished to equalize them to months of uniform length.....	-.56	+ 2.44	-.56	+ .44	-.56	+ .44	-.56	-.56	+ .44	-.56	+ .44	-.56
Number of births added or subtracted to equalize them to months of uniform length.....	-42	+ 190	-45	+ 35	-45	+ 31	-43	-44	+ 35	-40	+ 28	-39
Births of males, corrected and equalized, equalized to months of uniform length.....	2,309	2,367	2,440	2,433	2,422	2,149	2,329	2,416	2,432	2,147	1,925	2,096

Excluding 11 births in unknown month.

BIRTHS, 1879.

According to the returns of the county clerks to the State Department, there were 34,122 children born in the State of Michigan during the year ending December 31, 1879. This is a larger number than has been returned to this Department for any previous year, with only three exceptions—1873, 1876, 1878—and is much larger than the average for the past twelve years. The annual average number of births returned for the twelve years 1868–1879 is 30,616, which is 3,506 less than the number returned for the year 1879. Further comparisons of the various years may be made by reference to Table I., following.

It is thought that these statistics of births do not represent the number of children actually born in Michigan, in consequence of the delay in collecting these statistics made necessary by our registration law. From five to sixteen months' time passes after the births occur before the enumeration of them is made, during which time many removals and deaths may take place; other causes also probably operate to lead the enumerator to miss many of the older children who have been born during this time. In consequence of these probable omissions in the enumeration of the births, a correction has been made, which amounts in 1879 to 46.91 per cent. of the births returned. The following tabular exhibit shows, according to estimations by the compiler, the per cent. of births returned, and the per cent. of births added as a correction for the omissions in the enumeration. In 1879, only 68.05 per cent. of the births were returned, according to this exhibit, and the average for the nine years 1871–1879 was 68.19 per cent. The year 1879 was nearer an average year than any of the other years included in the exhibit.

YEARS.	Per Cent. of Births Returned.	Per Cent. of Births Added as Correction for Omissions.
1871.....	70.00	42.86
1872.....	64.95	43.95
1873.....	76.72	30.34
1874.....	55.75	79.37
1875.....	68.61	45.76
1876.....	75.73	32.04
1877.....	66.47	50.44
1878.....	67.41	48.34
1879.....	68.05	46.91
Average for 9 years..	68.19	46.67

VITAL STATISTICS OF MICHIGAN, 1879.

It is to be regretted that our State registration law necessitates this correction, by fixing the time for the enumeration so long after the children are born.

The number of births for certain periods of time during the year 1879 is shown in the following tabular exhibit:

PERIODS OF TIME.	Births as Returned.	Corrected as per Exhibit A, 4th line.	Corrected with 46.67 Per Cent.
Per quarter.....	8,530.50	12,536.00	12,511.50
Per month.....	2,843.50	4,178.67	4,170.50
Per week.....	656.19	964.31	962.42
Per day.....	93.48	137.83	137.11

The number of inhabitants of Michigan in 1874, the number of births in 1879 as returned and as corrected for omissions, and the relation of inhabitants to births are shown in the following exhibit:

SEX.	Inhabitants in 1874 Represented by Births in 1879.	Births as Returned.	Births Corrected for Omissions in Enumerating.	PER CENT. OF BIRTHS TO INHABITANTS.	
				Births as Returned.	Births Corrected for Omissions.
Total.....	1,322,430	34,122	50,065	2.58	3.79
Males.....	690,818	17,757	26,861	2.57	3.89
Females.....	631,612	16,317	23,224	2.58	3.68
Unknown.....	.....	48	.....	.....	.....

The number and per cent. of total number of births, by quarters of the year are shown in Table I., for each of the years 1874-1879, as returned and as corrected for omissions in the enumeration. In 1879, in births as returned, the greatest proportion is shown for the quarter ending with September, the smallest for the quarter ending with March. This is true of each year included in the table, with the single exception of the year 1878, when the greatest proportion was in the last quarter of the year. If the births as corrected be used, as is done in the lower part of the table, it is still found that the largest proportion is shown for the third quarter of the year in each of the years 1874-1879, excepting only 1878; but aside from this correspondence, there is a more uniform distribution of the births throughout the year. Taking the births as returned, considerably more than half of the children born in each of the years 1872-1879 were born during the last two quarters of the year; but using as evidence the births as corrected for omissions, it is seen that in six out of the eight years 1872-1879, less than half of the births occurred during the last two quarters of the year. The average proportion of births as returned for the years 1872-1879 as having occurred during the last half of the year is 54.52 per cent.; but if we use the births as corrected only 50.04 per cent. is shown as the average proportion of births occurring during the last half of the year. The correction, therefore, has the effect of distributing the births more evenly throughout the year.

TABLE I.—*Births by Quarters of the year, Exhibiting the Number and Per Cent. of Totals for the Years 1874 to 1879, inclusive, as Returned, and as Corrected for Omissions in the Enumeration.*

TOTALS, AND MONTHS WITH WHICH QUARTERS END.		1874.		1875.		1876.		1877.		1878.		1879.	
		Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.
As Returned.	Totals....	31,151	100.00	31,958	100.00	34,235	100.00	33,395	100.00	35,162	100.00	34,122	100.00
	March....	6,315	20.27	6,625	20.73	7,379	21.55	7,148	21.40	7,451	21.19	7,518	22.03
	June.....	7,606	24.42	7,962	24.91	8,339	24.36	7,995	23.94	8,539	24.28	8,174	23.96
	Sept.....	8,310	26.28	8,909	27.88	9,248	27.01	9,174	27.47	9,390	26.70	9,365	27.45
	Dec.....	8,373	26.86	8,402	26.29	9,165	26.77	9,007	26.97	9,750	27.73	9,035	26.47
	Unknown	45	.14	60	.19	104	.30	71	.21	32	.09	30	.09
	Average..	7,788	25.00	7,990	25.00	8,559	25.00	8,349	25.00	8,791	25.00	8,531	25.00
As Corrected for Omissions.	Totals....	55,841	100.00	46,553	100.00	45,172	100.00	50,203	100.00	52,145	100.00	50,130	100.00
	March....	13,707	24.55	11,074	23.79	10,840	24.00	12,446	24.79	12,742	24.44	12,679	25.29
	June.....	14,768	26.45	12,261	26.34	11,480	25.41	12,748	25.39	13,435	25.76	12,680	25.29
	Sept.....	15,019	26.90	12,494	26.84	11,868	26.25	13,258	26.41	13,402	25.70	12,227	26.39
	Dec.....	12,302	22.03	10,664	22.91	10,890	24.11	11,680	23.27	12,584	24.04	11,514	22.97
	Unknown	45	.08	60	.13	104	.23	71	.14	32	.06	30	.06
	Average..	13,960	25.00	11,638	25.00	11,293	25.00	12,551	25.00	13,036	25.00	12,533	25.00

* The number in unknown quarter of year included.

A comparison of the months as regards the number of children returned as having been born is facilitated by the arrangement in Table II., which table shows the number and per cent. of births in each month of each of the years 1874-1879, the months having the greatest number of births being placed first in the columns. In three of the six years, August heads the list, and in three December shows the largest number of births. The three months of August, September, and December are the first three months in the list for each of the years 1872-1879, with the exception of the year 1878, when October takes the place of September. The uniform showing of this table is that a little more than twenty-eight per cent. (28.45) of the births for each year were returned for the three months of August, September, and December. This table also shows that the two months of January and February are the last in order of greatest number first, uniformly indicating that the smallest number of births are returned for these first two months of the year.

But it should be borne in mind that probably a larger proportion of the births which actually occurred were returned for the later than for the earlier months of the year, as was explained on page 2 of this Report. If the births are corrected so as to include the probable omissions in the enumeration, as is done in Exhibit 2, following, the order of the months will be different, and the uniformity shown in Table II. destroyed.

VITAL STATISTICS OF MICHIGAN, 1879.

TABLE II.—Births during the Years 1874—1879, inclusive, according to the Returns, exhibiting the Number and Per Cent. of Total, by Months, arranged in Order by Number, Months having the greatest number first.

	1874.			1875.			1876.			1877.			1878.			1879.		
	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.	Month.	Num-ber.	Per Ct. of Total.
Total..		31,151	100.00	Total..	31,938	100.00	Total..	34,235	100.00	Total..	33,895	100.00	Total..	35,163	100.00	Total..	34,132	100.00
1 Aug. ..		3,077	9.89	Aug....	3,103	9.71	Dec.	3,905	9.36	Aug.	3,227	9.66	Dec.	3,423	9.73	Dec.	3,233	9.47
2 Sept. ..		2,972	9.54	Sept. ...	3,061	9.64	Aug.	3,124	9.13	Dec.	3,145	9.49	Aug.	3,295	9.37	Aug.	3,198	9.37
3 Dec.		2,921	9.38	Dec.	2,836	8.94	Sept.	3,110	9.08	Sept.	3,048	9.13	Oct.	3,266	9.29	Sept.	3,149	9.23
4 July.		2,761	8.86	Oct.	2,819	8.82	Oct.	3,039	8.88	Oct.	3,015	9.03	Sept.	3,260	9.27	Oct.	3,036	8.90
5 Oct.		2,726	8.75	Nov.	2,777	8.68	July.	3,014	8.80	July.	2,899	8.68	Nov.	3,061	8.71	July.	3,018	8.84
6 Nov.		2,726	8.75	July.	2,725	8.53	Nov.	2,921	8.53	Nov.	2,847	8.53	April.	2,937	8.35	May.	2,842	8.33
7 May.		2,586	8.30	May.	2,722	8.53	May.	2,670	8.38	Mar.	2,690	8.06	Mar.	2,836	8.07	Nov.	2,766	8.11
8 June.		2,539	8.31	April.	2,710	8.46	Mar.	2,744	8.01	May.	2,683	8.03	July.	2,835	8.06	Mar.	2,768	8.06
9 April.		2,464	7.91	June.	2,530	7.91	June.	2,739	8.00	June.	2,657	7.96	May.	2,805	7.98	April.	2,706	7.93
10 Mar.		2,462	7.90	Mar.	2,415	7.56	April.	2,730	7.97	April.	2,655	7.96	June.	2,797	7.95	June.	2,626	7.70
11 Feb.		1,954	6.27	Feb.	2,121	6.64	Feb.	2,362	6.87	Feb.	2,246	6.73	Feb.	2,414	6.87	Jan.	2,429	7.13
12 Jan.		1,899	6.10	Jan.	2,069	6.53	Jan.	2,258	6.57	Jan.	2,212	6.62	Jan.	2,201	6.26	Feb.	2,331	6.83
Unk.		45	.14	Unk.	60	.19	Unk.	104	.30	Unk.	71	.21	Unk.	92	.09	Unk.	30	.09
Av. ^a		2,566	8.33	Av. ^a	2,663	8.33	Av. ^a	2,853	8.33	Av. ^a	2,763	8.33	Av. ^a	2,930	8.33	Av. ^a	2,644	8.33

^a Including unknown month.

BIRTHS BY MONTHS, CORRECTED FOR OMISSIONS.

5

EXHIBIT 2.—*Births during the Years 1876, 1877, 1878, and 1879, as Corrected for Omissions in the Enumeration, exhibiting the Number and Per Cent. of Total, by Months arranged in order by Number, Months having the greatest number first.*

ORDER.	1876.			1877.			1878.			1879.		
	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.
	Total....	45,172	100.00	Total....	50,203	100.00	Total....	52,145	100.00	Total....	50,180	100.00
1	Aug.....	4,007	8.87	Aug.....	4,666	9.29	April....	4,759	9.13	Mar.....	4,530	9.04
2	July.....	3,960	8.77	Mar.....	4,553	9.08	March....	4,730	9.07	Aug.....	4,519	9.01
3	May.....	3,951	8.75	April....	4,365	8.69	Aug.....	4,710	9.03	May.....	4,407	8.79
4	Mar.....	3,950	8.74	July.....	4,335	8.63	Sept....	4,504	8.64	July.....	4,403	8.78
5	Sept....	3,891	8.61	May.....	4,278	8.52	May.....	4,411	8.46	Apr.....	4,321	8.62
6	April....	3,844	8.51	Sept....	4,257	8.48	Oct.....	4,357	8.36	Sept....	4,305	8.59
7	Dec.....	3,708	8.21	June.....	4,105	8.18	June.....	4,265	8.18	Jan.....	4,213	8.40
8	Oct.....	3,707	8.21	Oct.....	4,061	8.09	Dec.....	4,240	8.13	Oct.....	4,011	8.00
9	June.....	3,685	8.16	Jan.....	3,965	7.90	July.....	4,188	8.03	Dec.....	3,975	7.93
10	Nov.....	3,475	7.69	Feb.....	3,925	7.82	Feb.....	4,131	7.92	June.....	3,952	7.88
11	Feb.....	3,460	7.66	Dec.....	3,925	7.82	Nov.....	3,937	7.55	Feb.....	3,936	7.85
12	Jan.....	3,430	7.59	Nov.....	3,694	7.36	Jan.....	3,881	7.44	Nov.....	3,528	7.04
	Unk.....	104	.23	Unk.....	71	.14	Unk.....	82	.06	Unk.....	30	.06
	Aver'ge a	3,764	8.33	Aver'ge a	4,184	8.33	Aver'ge a	4,345	8.33	Aver'ge a	4,178	8.33

a Including births in unknown month.

VITAL STATISTICS OF MICHIGAN, 1879.

EXHIBIT A.—*Births in Michigan during the Year 1879, as Returned, as Corrected for Omissions in the Enumeration; the same Equalized for Increase of Population during the Year covered by the Returns, and the Births as thus Corrected and Equalized for the several Months, Equalized for Months of a Uniform length of 30.44 days; also, indicating some of the steps by which these results have been reached. (Still-births and Children of unknown Sex included.)*

	TOTAL.	MONTHS, 1879.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Births as returned by Registration Officers.....	34,092	2,429	2,331	2,768	2,706	2,842	2,623	3,013	3,198	3,149	3,036	2,766	3,233
Per cent. of births to be added for correction for time elapsing before enumeration.....		73.44	66.85	64.26	53.67	55.08	50.49	45.90	41.31	36.72	32.13	27.54	23.95
Number of births to be added for above correction.....	16,008	1,784	1,605	1,772	1,615	1,565	1,326	1,366	1,321	1,156	975	762	742
Births, if enumerated in months of occurrence.....	50,100	4,213	3,936	4,530	4,321	4,407	3,952	4,403	4,519	4,305	4,011	3,528	3,975
Per cent. of births to be added to equalize them to population at close of year.....		4.21	3.86	3.51	3.16	2.91	2.46	2.11	1.76	1.41	1.06	.71	.35
Births to be added to equalize them to population at close of year.....	1,192	177	152	168	137	124	97	93	80	91	43	25	14
Births, as corrected, equalized to population at close of year.....	51,292	4,390	4,088	4,698	4,458	4,531	4,049	4,496	4,599	4,396	4,054	3,553	3,989
Days and hundredths by which the months should be increased or diminished to equalize them to months of uniform length.....		—56	+2.44	—56	+44	—56	+44	—56	—56	+44	—56	+44	—56
Number of births added or subtracted to equalize them to months of uniform length.....	+41	—79	+356	—83	+65	—92	+59	—81	—83	+64	—73	+52	—72
Births, corrected and equalized, equalized to months of uniform length...	51,333	4,311	4,444	4,604	4,523	4,449	4,108	4,415	4,516	4,460	3,981	3,605	3,917

* Excluding 80 in unknown month.

BIRTHS OF MALES, CORRECTED, BY MONTHS.

7

EXHIBIT B.—Births of Males in Michigan during the Year 1879, as Returned, as Corrected for Omissions in the Enumeration; the same Equalized for Increase of Population during the Year covered by the Returns, and the Births as thus Corrected and Equalized for the several Months, Equalized for Months of 30.44 Days each.

	MONTHS, 1879.											
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
TOTAL.												
Births of Males as returned by Registration officers.....	1,250	1,195	1,409	1,406	1,509	1,831	1,846	1,664	1,696	1,601	1,448	1,701
Per cent. of births to be added for correction for time elapsing before enumeration.....	80.44	75.41	70.38	68.85	60.32	55.29	50.26	45.23	40.20	35.17	30.14	25.11
Number of births to be added for above correction.....	9,098	1,006	992	919	910	738	777	753	678	563	436	427
Births of males, if enumerated in months of occurrence.....	26,844	2,096	2,401	2,325	2,419	2,067	2,323	2,417	2,364	2,164	1,884	2,128
Per cent. of births to be added to equalize them to population at close of year.....	4.21	3.86	3.51	3.16	2.81	2.46	2.11	1.76	1.41	1.06	.71	.35
Births to be added to equalize them to population at close of year.....	600	95	84	73	48	51	49	43	33	23	13	7
Births of males, as corrected, equalized to population at close of year.....	27,444	2,351	2,485	2,398	2,467	2,118	2,372	2,460	2,397	2,187	1,897	2,135
Days and hundredths by which the months should be increased or diminished to equalize them to months of uniform length.....	—56	+ 2.44	—56	+ 44	—56	+ 44	—56	—56	+ 44	—56	+ 44	—56
Number of births added or subtracted to equalize them to months of uniform length.....	+ 21	—42	—45	+ 35	—45	+ 31	—43	—44	+ 35	—40	+ 29	—39
Births of males, corrected and equalized, equalized to months of uniform length.....	27,465	2,367	2,440	2,433	2,422	2,149	2,329	2,416	2,432	2,147	1,925	2,096

Excluding 11 births in unknown month.

BIRTHS, 1879.

According to the returns of the county clerks to the State Department, there were 34,122 children born in the State of Michigan during the year ending December 31, 1879. This is a larger number than has been returned to this Department for any previous year, with only three exceptions—1873, 1876, 1878—and is much larger than the average for the past twelve years. The annual average number of births returned for the twelve years 1868–1879 is 30,616, which is 3,506 less than the number returned for the year 1879. Further comparisons of the various years may be made by reference to Table I., following.

It is thought that these statistics of births do not represent the number of children actually born in Michigan, in consequence of the delay in collecting these statistics made necessary by our registration law. From five to sixteen months' time passes after the births occur before the enumeration of them is made, during which time many removals and deaths may take place; other causes also probably operate to lead the enumerator to miss many of the older children who have been born during this time. In consequence of these probable omissions in the enumeration of the births, a correction has been made, which amounts in 1879 to 46.91 per cent. of the births returned. The following tabular exhibit shows, according to estimations by the compiler, the per cent. of births returned, and the per cent. of births added as a correction for the omissions in the enumeration. In 1879, only 68.05 per cent. of the births were returned, according to this exhibit, and the average for the nine years 1871–1879 was 68.19 per cent. The year 1879 was nearer an average year than any of the other years included in the exhibit.

YEARS.	Per Cent. of Births Returned.	Per Cent. of Births Added as Correction for Omissions.
1871.....	70.00	42.86
1872.....	64.95	43.95
1873.....	76.72	30.34
1874.....	55.75	79.37
1875.....	68.61	45.76
1876.....	75.73	32.04
1877.....	66.47	50.44
1878.....	67.41	48.34
1879.....	68.05	46.91
Average for 9 years..	68.19	46.67

VITAL STATISTICS OF MICHIGAN, 1879.

It is to be regretted that our State registration law necessitates this correction, by fixing the time for the enumeration so long after the children are born.

The number of births for certain periods of time during the year 1879 is shown in the following tabular exhibit:

PERIODS OF TIME.	Births as Returned.	Corrected as per Exhibit A, 4th line.	Corrected with 46.67 Per Cent.
Per quarter.....	8,530.50	12,536.00	12,511.50
Per month.....	2,843.50	4,178.67	4,170.50
Per week.....	656.19	964.81	962.42
Per day.....	93.48	137.38	137.11

The number of inhabitants of Michigan in 1874, the number of births in 1879 as returned and as corrected for omissions, and the relation of inhabitants to births are shown in the following exhibit:

SEX.	Inhabitants in 1874 Represented by Births in 1879.	Births as Returned.	Births Corrected for Omissions in Enumerating.	PER CENT. OF BIRTHS TO INHABITANTS.	
				Births as Returned.	Births Corrected for Omissions.
Total.....	1,322,430	34,122	50,095	2.58	3.79
Males.....	690,818	17,757	26,861	2.57	3.89
Females.....	631,612	16,317	23,224	2.58	3.68
Unknown.....	.....	48	.....	.....	.....

The number and per cent. of total number of births, by quarters of the year are shown in Table I., for each of the years 1874-1879, as returned and as corrected for omissions in the enumeration. In 1879, in births as returned, the greatest proportion is shown for the quarter ending with September, the smallest for the quarter ending with March. This is true of each year included in the table, with the single exception of the year 1878, when the greatest proportion was in the last quarter of the year. If the births as corrected be used, as is done in the lower part of the table, it is still found that the largest proportion is shown for the third quarter of the year in each of the years 1874-1879, excepting only 1878; but aside from this correspondence, there is a more uniform distribution of the births throughout the year. Taking the births as returned, considerably more than half of the children born in each of the years 1872-1879 were born during the last two quarters of the year; but using as evidence the births as corrected for omissions, it is seen that in six out of the eight years 1872-1879, less than half of the births occurred during the last two quarters of the year. The average proportion of births as returned for the years 1872-1879 as having occurred during the last half of the year is 54.52 per cent.; but if we use the births as corrected only 50.04 per cent. is shown as the average proportion of births occurring during the last half of the year. The correction, therefore, has the effect of distributing the births more evenly throughout the year.

TABLE I.—*Births by Quarters of the year, Exhibiting the Number and Per Cent. of Totals for the Years 1874 to 1879, inclusive, as Returned, and as Corrected for Omissions in the Enumeration.*

TOTALS, AND MONTHS WITH WHICH QUARTERS END.		1874.		1875.		1876.		1877.		1878.		1879.	
		Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.
As Returned.	Totals....	31,151	100.00	31,958	100.00	34,233	100.00	33,395	100.00	35,162	100.00	34,122	100.00
	March....	6,315	20.27	6,625	20.73	7,379	21.55	7,148	21.40	7,451	21.19	7,518	22.03
	June.....	7,608	24.42	7,962	24.91	8,339	24.36	7,995	23.94	8,539	24.28	8,174	23.96
	Sept.....	8,810	28.28	8,909	27.88	9,248	27.01	9,174	27.47	9,390	26.70	9,365	27.45
	Dec.....	8,373	26.88	8,402	26.29	9,165	26.77	9,007	26.97	9,750	27.73	9,035	26.47
	Unknown	45	.14	60	.19	104	.30	71	.21	32	.09	30	.09
	Average..	7,788	25.00	7,990	25.00	8,559	25.00	8,349	25.00	8,791	25.00	8,531	25.00
As Corrected for Omissions.	Totals....	55,841	100.00	46,553	100.00	45,172	100.00	50,203	100.00	52,145	100.00	50,130	100.00
	March....	13,707	24.55	11,074	23.79	10,840	24.00	12,446	24.79	12,742	24.44	12,679	25.29
	June.....	14,768	26.45	12,281	26.34	11,480	25.41	12,748	25.39	13,485	25.76	12,680	25.29
	Sept.....	15,019	26.90	12,494	26.84	11,868	26.25	13,258	26.41	13,402	25.70	13,227	26.39
	Dec.....	12,302	22.03	10,664	22.91	10,890	24.11	11,680	23.27	12,684	24.04	11,514	22.97
	Unknown	45	.08	60	.13	104	.23	71	.14	32	.06	30	.06
	Average..	13,960	25.00	11,638	25.00	11,293	25.00	12,551	25.00	13,036	25.00	12,533	25.00

* The number in unknown quarter of year included.

A comparison of the months as regards the number of children returned as having been born is facilitated by the arrangement in Table II., which table shows the number and per cent. of births in each month of each of the years 1874-1879, the months having the greatest number of births being placed first in the columns. In three of the six years, August heads the list, and in three December shows the largest number of births. The three months of August, September, and December are the first three months in the list for each of the years 1872-1879, with the exception of the year 1878, when October takes the place of September. The uniform showing of this table is that a little more than twenty-eight per cent. (28.45) of the births for each year were returned for the three months of August, September, and December. This table also shows that the two months of January and February are the last in order of greatest number first, uniformly indicating that the smallest number of births are returned for these first two months of the year.

But it should be borne in mind that probably a larger proportion of the births which actually occurred were returned for the later than for the earlier months of the year, as was explained on page 2 of this Report. If the births are corrected so as to include the probable omissions in the enumeration, as is done in Exhibit 2, following, the order of the months will be different, and the uniformity shown in Table II. destroyed.

VITAL STATISTICS OF MICHIGAN, 1879.

TABLE II.—Births during the Years 1874—1879, inclusive, according to the Returns, exhibiting the Number and Per Cent. of Total, by Months, arranged in Order by Number, Months having the greatest number first.

Order	1874.			1875.			1876.			1877.			1878.			1879.		
	Montha.	Num-ber.	Per Ct. of Total.	Montha.	Num-ber.	Per Ct. of Total.	Montha.	Num-ber.	Per Ct. of Total.	Montha.	Num-ber.	Per Ct. of Total.	Montha.	Num-ber.	Per Ct. of Total.	Montha.	Num-ber.	Per Ct. of Total.
	Total..	31,151	100.00	Total..	31,353	100.00	Total..	34,235	100.00	Total..	33,395	100.00	Total..	33,162	100.00	Total..	34,122	100.00
1	Aug. ..	3,077	9.85	Aug....	3,103	9.71	Dec. ...	3,305	9.36	Aug. ...	3,327	9.66	Dec....	3,423	9.73	Dec....	3,233	9.47
2	Sept. ..	2,972	9.54	Sept. ...	3,061	9.64	Aug. ...	3,124	9.13	Dec....	3,145	9.43	Aug. ...	3,235	9.37	Aug. ...	3,198	9.37
3	Dec....	2,921	9.38	Dec....	2,836	8.94	Sept....	3,110	9.08	Sept....	3,048	9.13	Oct....	3,266	9.39	Sept....	3,149	9.23
4	July....	2,761	8.86	Oct....	2,819	8.93	Oct....	3,039	8.83	Oct....	3,015	9.03	Sept....	3,260	9.37	Oct....	3,036	8.90
5	Oct....	2,728	8.75	Nov....	2,737	8.53	July....	3,014	8.80	July....	2,899	8.68	Nov....	3,061	8.71	July....	3,018	8.84
6	Nov....	2,725	8.73	July....	2,725	8.53	Nov....	2,921	8.53	Nov....	2,847	8.53	April..	2,937	8.35	May....	2,842	8.33
7	May....	2,596	8.30	May....	2,722	8.53	May....	2,570	8.38	Mar....	2,690	8.06	Mar....	2,536	8.07	Nov....	2,766	8.11
8	June....	2,538	8.21	April..	2,710	8.48	Mar....	2,744	8.01	May....	2,683	8.03	July....	2,535	8.06	Mar....	2,758	8.08
9	April..	2,464	7.91	June ..	2,530	7.91	June ..	2,739	8.00	June ..	2,637	7.96	May....	2,505	7.96	April..	2,706	7.93
10	Mar....	2,462	7.90	Mar....	2,415	7.56	April..	2,730	7.97	April..	2,655	7.95	June ..	2,737	7.95	June ..	2,636	7.70
11	Feb....	1,954	6.27	Feb....	2,121	6.64	Feb....	2,352	6.87	Feb....	2,246	6.73	Feb....	2,414	6.87	Jan....	2,429	7.13
12	Jan....	1,999	6.10	Jan....	2,069	6.53	Jan....	2,258	6.57	Jan....	2,213	6.62	Jan....	2,301	6.36	Feb....	2,331	6.83
	Unk. ...	45	.14	Unk. ...	60	.19	Unk. ...	104	.30	Unk. ...	71	.21	Unk. ...	32	.09	Unk. ...	30	.09
	Av.... ^a	2,596	8.33	Av.... ^a	2,663	8.33	Av.... ^a	2,833	8.33	Av.... ^a	2,763	8.33	Av.... ^a	2,930	8.33	Av.... ^a	2,844	8.33

^a Including unknown month.

BIRTHS BY MONTHS, CORRECTED FOR OMISSIONS.

5

EXHIBIT 2.—*Births during the Years 1876, 1877, 1878, and 1879, as Corrected for Omissions in the Enumeration, exhibiting the Number and Per Cent. of Total, by Months arranged in order by Number, Months having the greatest number first.*

ORDER.	1876.			1877.			1878.			1879.		
	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.
	Total....	45,172	100.00	Total....	50,208	100.00	Total....	52,145	100.00	Total....	50,130	100.00
1	Aug.....	4,007	8.87	Aug.....	4,666	9.29	April....	4,759	9.13	Mar.....	4,530	9.04
2	July.....	3,960	8.77	Mar.....	4,553	9.08	March....	4,730	9.07	Aug.....	4,519	9.01
3	May.....	3,951	8.75	April....	4,365	8.69	Aug....	4,710	9.03	May.....	4,407	8.79
4	Mar.....	3,950	8.74	July.....	4,335	8.63	Sept....	4,504	8.64	July.....	4,403	8.78
5	Sept....	3,891	8.61	May.....	4,278	8.52	May.....	4,411	8.46	Apr.....	4,321	8.62
6	April....	3,844	8.51	Sept....	4,257	8.48	Oct.....	4,357	8.36	Sept....	4,305	8.59
7	Dec.....	3,708	8.21	June.....	4,105	8.18	June....	4,265	8.18	Jan.....	4,213	8.40
8	Oct.....	3,707	8.21	Oct.....	4,061	8.09	Dec.....	4,240	8.13	Oct.....	4,011	8.00
9	June....	3,685	8.16	Jan.....	3,965	7.90	July.....	4,188	8.03	Dec.....	3,975	7.93
10	Nov.....	3,475	7.69	Feb.....	3,925	7.82	Feb.....	4,131	7.92	June....	3,952	7.88
11	Feb.....	3,460	7.66	Dec.....	3,925	7.82	Nov.....	3,937	7.55	Feb.....	3,936	7.85
12	Jan.....	3,430	7.59	Nov.....	3,694	7.36	Jan.....	3,881	7.44	Nov.....	3,523	7.04
	Unk.....	104	.23	Unk.....	71	.14	Unk....	32	.06	Unk.....	30	.06
	Aver'ge ^a	3,764	8.33	Aver'ge ^a	4,184	8.33	Aver'ge ^a	4,345	8.33	Aver'ge ^a	4,178	8.33

^a Including births in unknown month.

the number of inhabitants in 1874, which is one child born to about every thirty-nine inhabitants.

In the study of this table, it is usual to make four propositions, as follows: 1, a greater than average birth-rate is coincident with more than the average proportion of males; 2, a greater than average birth-rate is coincident with less than the average proportion of males; 3, a less than average birth-rate is coincident with less than the average proportion of males; 4, a less than average birth-rate is coincident with more than the average proportion of males. Seventy-seven counties are represented in the table, for four of which there is no statement of population. The first proposition above is true concerning 21 of the remaining 73 counties; the second proposition is true of 26 counties; the third proposition is true of 16 counties; the fourth proposition is true of 10 counties. Combining the first and third, and the second and fourth propositions, it is seen that in 37 of the 73 counties, a large birth-rate was attended with a large proportion of males, or *vice versa*, and in 36 of the 73 counties a large birth-rate was attended with a small proportion of males, or *vice versa*; so that the evidence of this table is about as much on one side as the other of the question. Does an increase in the birth-rate increase the proportion of males? The four counties for which there is no statement of population, may vary the showing; and it should be borne in mind that the data of births and of population are for different years.

TABLE VI.—*Exhibiting for the State and Counties of Michigan, by Sex, the Population in 1874, the Per Cent. of Births in 1879 to Population in 1874, the Number of Males to 100 Females born during the Year 1879, and by Sex and by Color the Number of Children born during the Year ending December 31, 1879. (Still-births included.)*

STATE AND COUNTIES.	Births,— Males to 100 Females.	SEX.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR,—CHILDREN BORN IN 1879.					
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk.
State..... ^a	109	Total.....	-----	1,322,430	2.58	34,122	53,729	b 133	96	c 122	42
		Males.....	52.11	690,818	2.57	17,757	17,550	69	52	68	18
		Females..	47.89	631,612	2.58	16,317	16,148	64	44	52	9
		Unknown	-----	-----	-----	48	31	-----	-----	2	15
Alcona.....	90	Total.....	-----	1,214	4.70	57	56	1	-----	-----	-----
		Males.....	47.37	688	3.92	27	26	1	-----	-----	-----
		Females..	52.63	526	5.70	30	30	-----	-----	-----	-----
Allegan.....	112	Total.....	-----	32,381	2.62	848	841	1	5	1	-----
		Males.....	52.77	16,976	2.63	447	442	1	4	-----	-----
		Females..	47.23	15,405	2.60	400	398	-----	1	1	-----
		Unknown	-----	-----	-----	1	1	-----	-----	-----	-----
Alpena.....	132	Total.....	-----	4,807	4.39	211	211	-----	-----	-----	-----
		Males.....	56.87	2,808	4.27	120	120	-----	-----	-----	-----
		Females..	43.13	1,999	4.55	91	91	-----	-----	-----	-----
Antrim.....	103	Total.....	-----	3,002	4.33	130	129	-----	-----	1	-----
		Males.....	50.77	1,654	3.99	66	65	-----	-----	1	-----
		Females..	49.23	1,348	4.75	64	64	-----	-----	-----	-----
Baraga..... ^d	130	Total.....	-----	-----	-----	53	26	-----	-----	e 17	-----
		Males.....	56.60	a	-----	30	19	-----	-----	11	-----
		Females..	43.40	-----	-----	23	17	-----	-----	6	-----
Barry.....	111	Total.....	-----	22,051	2.32	511	511	-----	-----	-----	-----
		Males.....	52.64	11,588	2.32	269	269	-----	-----	-----	-----
		Females..	47.36	10,463	2.31	242	242	-----	-----	-----	-----
Bay.....	115	Total.....	-----	24,832	3.87	960	953	2	1	4	-----
		Males.....	53.54	13,657	3.76	514	510	2	-----	2	-----
		Females..	46.46	11,175	3.99	446	443	-----	1	2	-----
Benzie.....	115	Total.....	-----	2,663	4.32	115	112	2	-----	-----	1
		Males.....	53.51	1,422	4.29	61	61	-----	-----	-----	-----
		Females..	46.49	1,241	4.27	53	51	2	-----	-----	-----
		Unknown	-----	-----	-----	1	-----	-----	-----	-----	1

^a For counties and townships from which no returns of births were received, see Table XXI.

^b 3 males and 4 females "Colored."

^c 22 males and 13 females White and Indian, and 2 males and 2 females $\frac{1}{2}$ Indian.

^d Population of Baraga county is included in population of Houghton county, and cannot be ascertained. ^e 3 males White and Indian, and 2 males and 2 females $\frac{1}{2}$ Indian.

TABLE VI.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

COUNTIES. ^a	Births,— Males to 100 Females.	SEX.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR,—CHILDREN BORN IN 1879.						
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk	
Berrien.....	112	Total.....	-----	33,029	1.72	603	596	b 5	2	-----	-----	
		Males.....	52.90	17,942	1.78	319	316	1	2	-----	-----	
		Females..	47.10	17,087	1.66	284	280	4	-----	-----	-----	
Branch.....	116	Total.....	-----	25,728	1.84	474	470	-----	-----	-----	4	
		Males.....	53.60	13,041	1.94	253	252	-----	-----	-----	1	
		Females..	46.40	12,685	1.73	219	216	-----	-----	-----	3	
		Unknown.....	-----	-----	-----	2	2	-----	-----	-----	-----	
		Total.....	-----	35,655	1.44	515	508	4	1	2	-----	-----
		Males.....	49.61	18,156	1.40	255	250	2	1	2	-----	-----
Calhoun.....	98	Females..	50.39	17,499	1.48	259	257	2	-----	-----	-----	
		Unknown.....	-----	-----	-----	1	1	-----	-----	-----	-----	
		Total.....	-----	19,596	1.69	332	305	3	23	-----	-----	-----
Cass.....	99	Males.....	49.85	10,128	1.63	165	148	3	13	-----	-----	
		Females..	50.15	9,468	1.75	166	156	-----	10	-----	-----	-----
		Unknown.....	-----	-----	-----	1	1	-----	-----	-----	-----	
Charlevoix..	83	Total.....	-----	2,360	7.37	174	168	1	-----	5	-----	
		Males.....	45.40	1,280	6.17	79	77	-----	-----	2	-----	-----
		Females..	54.60	1,080	8.80	95	91	1	-----	3	-----	-----
Cheboygan..	102	Total.....	-----	3,070	5.70	175	171	-----	1	c 2	-----	
		Males.....	50.57	1,706	5.16	88	87	-----	-----	1	-----	-----
		Females..	49.43	1,364	6.30	86	84	-----	1	1	-----	-----
		Unknown.....	-----	-----	-----	1	-----	-----	-----	-----	-----	
		Total.....	-----	1,949	7.18	140	112	-----	-----	d 28	-----	-----
		Males.....	53.57	1,091	6.87	75	58	-----	-----	17	-----	-----
Chippewa...	115	Females..	46.43	858	7.58	65	54	-----	-----	11	-----	
		Total.....	-----	1,354	4.65	63	63	-----	-----	-----	-----	-----
		Males.....	42.86	745	3.62	27	27	-----	-----	-----	-----	-----
Clare.....	75	Females..	57.14	609	5.91	36	36	-----	-----	-----	-----	
		Total.....	-----	23,661	2.09	494	491	1	-----	-----	2	-----
		Males.....	49.49	12,162	2.00	243	242	1	-----	-----	-----	-----
Clinton.....	98	Females..	50.51	11,499	2.16	245	248	-----	-----	-----	-----	
		Unknown.....	-----	-----	-----	3	1	-----	-----	-----	-----	-----
		Total.....	-----	-----	-----	26	25	-----	-----	1	-----	-----
Crawford...	117	Males.....	53.85	e	-----	14	14	-----	-----	-----	-----	
		Females..	46.15	-----	-----	12	11	-----	-----	1	-----	-----
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

^a For counties and townships from which no returns of births were received, see Table XXI.
^b 2 females "Colored." ^c 1 female White and Indian. ^d 16 males and 8 females White and Indian.
 * Population of Crawford county is included in population of Kalamazoo county, and cannot be ascertained.

TABLE VI.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

COUNTIES. ^a	Births,— Males to 100 Females.	SEX.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR,—CHILDREN BORN IN 1879.					
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk.
Delta.....	80	Total.....	-----	4,298	3.09	133	132	-----	-----	1	-----
		Males.....	44.36	2,610	2.26	59	59	-----	-----	-----	-----
		Females..	55.64	1,688	4.38	74	73	-----	-----	1	-----
Eaton.....	120	Total.....	-----	26,907	2.48	667	663	-----	2	-----	2
		Males.....	54.52	13,875	2.61	362	360	-----	2	-----	-----
		Females..	45.48	13,032	2.32	302	302	-----	-----	-----	-----
		Unknown	-----	-----	-----	3	1	-----	-----	-----	2
Emmet.....	114	Total.....	-----	1,272	11.79	150	113	-----	-----	b 37	-----
		Males.....	53.33	669	11.96	80	58	-----	-----	23	-----
		Females..	46.67	603	11.61	70	55	-----	-----	15	-----
Genesee.....	114	Total.....	-----	34,568	2.06	711	707	1	3	-----	-----
		Males.....	53.17	17,536	2.15	377	375	-----	2	-----	-----
		Females..	46.83	17,032	1.95	333	330	1	1	-----	-----
		Unknown	-----	-----	-----	2	2	-----	-----	-----	-----
Gladwin....	45	Total.....	-----	285	6.04	16	16	-----	-----	-----	-----
		Males.....	31.25	145	3.45	5	5	-----	-----	-----	-----
		Females..	68.75	120	9.17	11	11	-----	-----	-----	-----
Gr. Traverse	118	Total.....	-----	5,349	4.80	246	246	-----	-----	-----	-----
		Males.....	54.07	2,801	4.75	133	133	-----	-----	-----	-----
		Females..	45.93	2,548	4.43	113	113	-----	-----	-----	-----
Gratiot.....	105	Total.....	-----	13,896	3.35	465	465	-----	-----	-----	-----
		Males.....	51.18	7,304	3.26	238	238	-----	-----	-----	-----
		Females..	48.82	6,592	3.45	227	227	-----	-----	-----	-----
Hillsdale....	106	Total.....	-----	31,566	1.66	524	524	-----	-----	-----	-----
		Males.....	51.53	15,971	1.68	269	269	-----	-----	-----	-----
		Females..	48.47	15,595	1.62	253	253	-----	-----	-----	-----
		Unknown	-----	-----	-----	2	2	-----	-----	-----	-----
Houghton... ^c	119	Total.....	-----	19,080	4.65	834	834	-----	-----	-----	-----
		Males.....	54.30	11,013	4.36	480	480	-----	-----	-----	-----
		Females..	45.70	8,017	5.04	404	404	-----	-----	-----	-----
Huron.....	104	Total.....	-----	11,964	4.28	510	510	-----	-----	-----	-----
		Males.....	50.98	6,614	3.93	260	260	-----	-----	-----	-----
		Females..	49.02	5,350	4.67	250	250	-----	-----	-----	-----

^a For townships from which no returns of births were received, see Table XXI.^b 3 males White and Indian.^c Population of Baraga county is included in population of Houghton county, and cannot be ascertained.

TABLE VI.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

COUNTIES. ^a	Births,— Males to 100 Females.	SEX.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR.—CHILDREN BORN IN 1879.					
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk.
Ingham.....	92	Total.....		29,193	1.98	579	572	b 6	1		
		Males.....	48.01	15,204	1.83	278	276	2			
		Females.....	51.99	13,989	2.15	301	296	4	1		
Ionia.....	104	Total.....		28,376	2.08	590	588	1	1		
		Males.....	51.02	14,788	2.04	301	300	1			
		Females.....	48.98	13,588	2.13	289	288		1		
Iosco.....	95	Total.....		4,519	2.68	121	121				
		Males.....	48.76	2,671	2.21	59	59				
		Females.....	51.24	1,848	3.35	62	62				
Isabella.....	118	Total.....		6,059	5.08	308	303	1		3	1
		Males.....	54.07	3,273	5.07	166	161	1		3	1
		Females.....	45.93	2,786	5.06	141	141				
		Unknown.....				1	1				
Isle Royal. ^c											
Jackson.....	105	Total.....		37,983	1.92	729	720	8	1		
		Males.....	51.17	19,853	1.88	373	371	2			
		Females.....	48.83	18,135	1.96	356	349	6	1		
Kalamazoo.....	89	Total.....		32,284	1.90	613	605	5	1		2
		Males.....	47.13	16,583	1.73	287	284	3			
		Females.....	52.87	15,701	2.05	322	319	2	1		
		Unknown.....				4	2				2
Kalkaska.. ^d	85	Total.....		1,259	5.00	63	63				
		Males.....	46.03	692	4.19	29	29				
		Females.....	53.97	567	6.00	34	34				
Kent.....	111	Total.....		62,671	2.56	1,605	1,577	e 8	6		14
		Males.....	52.65	32,576	2.59	845	830	2	4		9
		Females.....	47.35	30,095	2.53	760	747	6	2		5
Keweenaw.....	132	Total.....		3,391	5.40	183	183				
		Males.....	56.83	2,050	5.07	104	104				
		Females.....	43.17	1,341	5.89	79	79				
Lake.....	100	Total.....		1,813	2.65	48	48				
		Males.....	50.00	1,015	2.36	24	24				
		Females.....	50.00	798	3.01	24	24				

^a For townships from which no returns of births were received, see Table XXI.^b 1 female "Colored."^c No returns from county clerk to State Department.^d Population of Crawford county is included in population of Kalkaska county, and cannot be ascertained.^e 1 male "Colored."

BIRTHS BY COUNTIES, BY SEX, BY COLOR.

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TABLE VI.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

COUNTIES.	Births,— Males to 100 Females.	Sex.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR,—CHILDREN BORN IN 1879.					
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk.
Lapeer.....	106	Total.....	-----	25,140	2.39	602	598	-----	3	1	-----
		Males.....	51.50	13,086	2.36	309	307	-----	1	1	-----
		Females..	48.50	12,045	2.42	291	289	-----	2	-----	-----
		Unknown	-----	-----	-----	2	2	-----	-----	-----	-----
Leelanaw...	103	Total.....	-----	5,031	3.18	160	157	-----	-----	3	-----
		Males.....	50.63	2,692	3.01	81	79	-----	-----	2	-----
		Females..	49.37	2,339	3.38	79	78	-----	-----	1	-----
Lenawee.....	106	Total.....	-----	46,084	1.48	681	673	5	1	-----	-----
		Males.....	51.47	23,256	1.50	350	348	2	-----	-----	-----
		Females..	48.53	22,828	1.45	330	325	3	1	-----	-----
		Unknown	-----	-----	-----	1	1	-----	-----	-----	-----
Livingston..	117	Total.....	-----	20,329	2.11	423	427	1	-----	-----	-----
		Males.....	53.97	10,569	2.19	221	220	1	-----	-----	-----
		Females..	46.03	9,760	2.03	197	197	-----	-----	-----	-----
Mackinac...	79	Total.....	-----	372	6.73	25	21	-----	-----	b 4	-----
		Males.....	44.00	193	5.70	11	10	-----	-----	1	-----
		Females..	56.00	179	7.82	14	11	-----	-----	3	-----
Macomb.....	97	Total.....	-----	28,305	2.12	601	601	-----	-----	-----	-----
		Males.....	49.25	14,367	2.06	296	296	-----	-----	-----	-----
		Females..	50.75	13,938	2.19	305	305	-----	-----	-----	-----
Manistee....	117	Total.....	-----	8,471	4.70	398	398	-----	-----	-----	-----
		Males.....	53.90	4,792	4.47	214	214	-----	-----	-----	-----
		Females..	46.10	3,679	4.97	183	183	-----	-----	-----	-----
		Unknown	-----	-----	-----	1	1	-----	-----	-----	-----
Manitou.....	108	Total.....	-----	657	3.81	25	25	-----	-----	-----	-----
		Males.....	52.00	364	3.57	13	13	-----	-----	-----	-----
		Females..	48.00	293	4.10	12	12	-----	-----	-----	-----
Marquette..	107	Total.....	-----	21,946	3.51	770	768	-----	1	c 1	-----
		Males.....	51.69	12,393	3.09	398	396	-----	-----	-----	-----
		Females..	48.31	9,053	4.11	372	370	-----	1	1	-----
		Unknown	-----	5,361	4.09	219	215	-----	-----	4	-----
Mason.....	121	Total.....	-----	54.84	2,971	4.01	119	119	-----	-----	-----
		Males.....	54.84	2,971	4.01	119	119	-----	-----	-----	-----
		Females..	45.16	2,390	4.10	98	96	-----	-----	2	-----
		Unknown	-----	-----	-----	3	-----	-----	-----	2	-----

^a For townships from which no returns of births were received, see Table XXI.

^b 1 male and 3 females White and Indian.

^c 1 female White and Indian.

TABLE VI.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

COUNTIES.	Births,— Males to 100 Females.	Sex.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR,—CHILDREN BORN IN 1879.					
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk.
Necosta	110	Total .....	.....	9,132	3.58	327	323	.....	4	.....	.....
		Males	52.29	4,874	3.51	171	170	.....	1	.....	.....
		Females ..	47.71	4,258	3.66	156	153	.....	3	.....	.....
Menominee ..	89	Total .....	.....	3,490	2.49	87	87	.....	.....	.....	.....
		Males	47.13	2,213	1.85	41	41	.....	.....	.....	.....
		Females ..	52.87	1,277	3.60	46	46	.....	.....	.....	.....
Midland	88	Total .....	.....	4,765	3.04	145	145	.....	.....	.....	.....
		Males	46.90	2,593	2.62	68	68	.....	.....	.....	.....
		Females ..	53.10	2,172	3.55	77	77	.....	.....	.....	.....
Missaukee ..	123	Total .....	.....	606	4.79	20	29	.....	.....	.....	.....
		Males	55.17	395	4.06	16	16	.....	.....	.....	.....
		Females ..	44.83	211	6.16	13	13	.....	.....	.....	.....
Monroe	131	Total .....	.....	30,111	2.70	812	810	.....	1	.....	1
		Males	56.67	15,302	3.00	459	458	.....	1	.....	.....
		Females ..	43.33	14,809	2.37	351	351	.....	.....	.....	.....
		Unknown ..	.....	.....	.....	2	1	.....	.....	.....	1
Montcalm...	118	Total .....	.....	20,354	3.06	623	620	.....	2	.....	.....
		Males	54.21	11,066	3.03	335	335	.....	.....	.....	.....
		Females ..	45.79	9,298	3.04	283	281	.....	2	.....	.....
		Unknown ..	.....	.....	.....	4	4	.....	.....	.....	.....
Muskegon ..	110	Total .....	.....	17,410	2.79	485	485	.....	.....	.....	.....
		Males	52.27	9,658	2.62	253	253	.....	.....	.....	.....
		Females ..	47.73	7,752	2.98	231	231	.....	.....	.....	.....
		Unknown ..	.....	.....	.....	1	1	.....	.....	.....	.....
Newaygo ...	113	Total .....	.....	8,758	2.95	258	257	.....	1	.....	.....
		Males	53.10	4,879	2.81	137	137	.....	.....	.....	.....
		Females ..	46.90	3,879	3.12	121	120	.....	1	.....	.....
Oakland	104	Total .....	.....	38,082	1.55	591	588	1	.....	.....	.....
		Males	50.93	19,446	1.55	301	298	1	.....	.....	.....
		Females ..	49.07	18,636	1.56	290	290	.....	.....	.....	.....
Oscana	104	Total .....	.....	8,360	3.39	283	278	.....	.....	5	.....
		Males	50.88	4,581	3.14	144	141	.....	.....	3	.....
		Females ..	49.12	3,779	3.68	139	137	.....	.....	2	.....
Ogemaw	57	Total .....	.....	207	5.31	11	11	.....	.....	.....	.....
		Males	36.36	153	2.61	4	4	.....	.....	.....	.....
		Females ..	63.64	54	12.96	7	7	.....	.....	.....	.....

* For townships from which no returns of births were received, see Table XXI.

TABLE VI.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

COUNTIES.	Births,— Males to 100 Females.	Sex.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR,—CHILDREN BORN IN 1879.					
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk.
Ontonagon..	100	Total.....	-----	2,406	2.78	67	67	-----	-----	-----	
		Males.....	50.00	1,276	2.59	33	33	-----	-----	-----	
		Females..	50.00	1,130	2.92	33	33	-----	-----	-----	
		Unknown.....	-----	-----	-----	1	1	-----	-----	-----	
Osceola.....	108	Total.....	-----	6,216	4.02	250	250	-----	-----	-----	
		Males.....	52.00	3,491	3.72	130	130	-----	-----	-----	
		Females..	48.00	2,725	4.40	120	120	-----	-----	-----	
Otsego.....	92	Total.....	-----	288	10.50	25	25	-----	-----	-----	
		Males.....	48.00	163	7.41	12	12	-----	-----	-----	
		Females..	52.00	76	17.11	13	13	-----	-----	-----	
Ottawa.....	120	Total.....	-----	29,929	2.84	851	851	-----	-----	-----	
		Males.....	54.52	15,789	2.94	464	464	-----	-----	-----	
		Females..	45.48	14,140	2.74	387	387	-----	-----	-----	
Presque Isle..	94	Total.....	-----	1,615	6.13	99	98	1	-----	-----	
		Males.....	48.46	851	5.64	48	47	1	-----	-----	
		Females..	51.52	764	6.68	51	51	-----	-----	-----	
Roscommon..	600	Total.....	-----	276	2.54	7	7	-----	-----	-----	
		Males.....	85.71	197	3.21	6	6	-----	-----	-----	
		Females..	14.29	89	1.12	1	1	-----	-----	-----	
Saginaw.....	102	Total.....	-----	48,409	2.75	1,330	1,321	4	2	1	2
		Males.....	50.60	25,968	2.58	671	669	1	1	-----	-----
		Females..	49.40	22,441	2.92	655	650	3	1	1	-----
		Unknown.....	-----	-----	-----	4	2	-----	-----	-----	2
Sanilac.....	109	Total.....	-----	16,292	4.30	701	701	-----	-----	-----	-----
		Males.....	52.07	8,652	4.22	365	365	-----	-----	-----	-----
		Females..	47.93	7,640	4.40	336	336	-----	-----	-----	-----
Schoolcraft ^b	33	Total.....	-----	-----	-----	4	4	-----	-----	-----	-----
		Males.....	25.00	b	-----	1	1	-----	-----	-----	-----
		Females..	75.00	-----	-----	3	3	-----	-----	-----	-----
Shiawassee..	93	Total.....	-----	21,773	1.97	429	422	-----	-----	-----	7
		Males.....	48.12	11,265	1.82	205	202	-----	-----	-----	3
		Females..	51.88	10,508	2.10	221	220	-----	-----	-----	1
		Unknown.....	-----	-----	-----	3	-----	-----	-----	-----	2

^a For townships from which no returns of births were received, see Table XXI.^b The only township reporting births was organized since the census was taken.

TABLE VI.—CONTINUED.—*Births by Counties, by Sex, and by Color.*

COUNTIES.*	Births,— Males to 100 Females.	Sex.	Per Ct. of Births of each Sex to Total of both Sexes.	Popula- tion in 1874 Rep- resented by Births in 1879.	Per Ct. of Births of each Sex to Popula- tion of same Sex.	COLOR.—CHILDREN BORN IN 1879.				
						Total of all Colors.	White.	Black.	Mu- latto.	In- dian.	Unk.
St. Clair.....	111	Total.....	.....	40,688	2.57	1,044	1,044	.....	.....	.....
		Males.....	52.50	21,181	2.58	547	547	.....	.....	.....
		Females..	47.50	19,507	2.54	495	495	.....	.....	.....
		Unknown.....	.....	.....	.....	2	2	.....	.....	.....
St. Joseph..	119	Total.....	.....	25,906	1.72	445	441	1	2	.....
		Males.....	54.28	13,267	1.82	241	238	1	2	.....
		Females..	45.72	12,639	1.61	203	203	.....	.....	.....
		Unknown.....	.....	.....	.....	1	.....	.....	.....	1
Tuscola.....	127	Total.....	.....	16,998	3.47	590	590	.....	.....	.....
		Males.....	55.93	8,950	3.69	330	330	.....	.....	.....
		Females..	44.07	8,048	3.23	260	260	.....	.....	.....
Van Buren..	106	Total.....	.....	29,156	1.85	538	524	b 5	8	1
		Males.....	51.49	15,062	1.84	277	269	3	5	.....
		Females..	48.51	14,094	1.85	261	255	2	3	1
Washtenaw..	104	Total.....	.....	35,635	1.71	609	588	a 15	6	.....
		Males.....	50.90	18,030	1.72	310	302	6	2	.....
		Females..	49.10	17,605	1.70	299	286	9	4	.....
Wayne.....	111	Total.....	.....	144,903	3.02	4,378	4,310	50	17	.....
		Males.....	52.71	72,306	3.19	2,307	2,264	31	11	.....
		Females..	47.29	72,597	2.85	2,070	2,045	19	6	.....
		Unknown.....	.....	.....	.....	1	1	.....	.....	.....
Wexford.....	86	Total.....	.....	3,011	5.65	170	170	.....	.....	.....
		Males.....	46.15	1,753	4.45	78	78	.....	.....	.....
		Females..	53.85	1,259	7.23	91	91	.....	.....	.....
		Unknown.....	.....	.....	.....	1	1	.....	.....	.....

* For townships from which no returns of births were received, see Table XXI.

b 1 male and 1 female "Colored."

c 1 male "Colored."

Of the children born in Michigan in 1879, 46.49 per cent. were born of parents who were both born in the U. S. A., as shown by Table VII., and 33.32 per cent. were children of parents who were both foreign-born, i. e., born outside of the United States of America.

TABLE VII.—*Exhibiting, by Sex, by Number, and by Per Cent. of Total, the Parent-Nativity of Children returned as having been Born in Michigan during the Year 1879.*

NATIVITY OF PARENTS OF CHILDREN BORN, 1879.	TOTAL BIRTHS, 1879.							
	NUMBER.				PER CENT. OF TOTAL.			
	Total.	Males.	Females.	Unk.	Total.	Males.	Females.	Unk.
All Nativities	34,122	17,757	16,317	48	100.00	100.00	100.00	100.00
Both Parents Native	15,864	8,225	7,618	21	46.49	46.32	46.69	43.75
Both Parents Foreign	11,369	5,939	5,415	15	33.32	33.45	33.19	31.25
Foreign Father and Native Mother	3,956	2,023	1,931	2	11.59	11.39	11.63	4.17
Foreign Mother and Native Father	2,039	1,068	950	1	5.98	6.13	5.82	2.03
Unknown Mother, Father Native	142	79	63	-----	.41	.44	.39	-----
Unknown Mother, Father Foreign	72	36	36	-----	.21	.20	.22	-----
Unknown Father, Mother Native	204	108	96	-----	.60	.61	.59	-----
Unknown Father, Mother Foreign	84	41	43	-----	.25	.23	.26	-----
Both Unknown	392	218	165	9	1.15	1.23	1.01	13.75
One or Both Native	22,205	11,523	10,658	24	65.06	64.89	65.32	50.00
One or Both Foreign	11,917	6,234	5,659	24	34.94	35.11	34.68	49.00

Exhibit F is similar to Table VII., carrying the evidence over a series of years, from 1874 to 1879, inclusive. The proportion of children born of parents who were both native born was greater in 1879 than in any of the previous years contained in the exhibit.

EXHIBIT F.—Parent-Nativity of Children returned as having been Born in Michigan during each of the Years 1874 to 1879, inclusive.

NATIVITY OF PARENTS OF CHILDREN BORN.	1874.		1875.		1876.		1877.		1878.		1879.	
	Num- ber.	Per Cent. of Total.	Num- ber.	Per Cent. of Total.	Num- ber.	Per Cent. of Total.	Num- ber.	Per Cent. of Total.	Num- ber.	Per Cent. of Total.	Num- ber.	Per Cent. of Total.
All Nativities.....	31,151	100.00	31,958	100.00	34,235	100.00	33,395	100.00	35,193	100.00	34,122	100.00
Both Parents Native....	13,341	42.83	14,228	44.51	15,551	45.42	15,270	45.73	16,323	46.42	15,864	46.49
Both Parents Foreign....	10,517	33.76	11,120	34.80	11,901	34.76	11,557	34.61	11,992	34.10	11,369	33.32
Foreign Father and Na- tive Mother.....	3,130	10.05	3,246	10.16	3,587	10.48	3,635	10.88	3,861	10.98	3,956	11.59
Foreign Mother and Na- tive Father.....	1,680	5.39	1,727	5.40	1,968	5.46	1,948	5.83	1,956	5.56	2,039	5.96
One or Both Unknown..	2,483	7.97	1,639	5.13	1,328	3.88	985	2.95	1,030	2.93	894	2.62
One or Both Parents Native.....	18,151	58.27	19,199	60.08	21,006	61.36	20,853	62.44	22,140	62.97	21,839	64.06
One or Both Parents Foreign.....	15,327	49.20	16,093	50.36	17,356	50.70	17,140	51.33	17,809	50.65	17,364	50.69
Father { Native.....			16,309	51.03	17,703	51.71	17,392	52.08	18,489	52.58	18,045	52.96
{ Foreign.....			14,812	46.35	15,721	45.92	15,313	45.85	15,961	45.45	15,397	45.13
{ Unknown.....			837	2.62	811	2.37	690	2.07	632	1.97	680	1.99
Mother { Native.....			17,686	55.34	19,347	56.51	19,098	57.19	20,389	57.99	20,024	58.68
{ Foreign.....			12,961	40.56	13,853	40.46	13,599	40.72	14,032	39.91	13,492	39.54
{ Unknown.....			1,311	4.10	1,035	3.02	698	2.09	741	2.11	606	1.78

* Excluding cases where nativity of either parent is unknown.

TABLE VIII.—*Exhibiting, for the State and Counties of Michigan, by Sex, the Total Number of Children Born during the Year 1879, and the Parent-Nativity of such Children, so far as stated in the Returns. (Still-births included.)*

		NATIVITY OF PARENTS OF CHILDREN BORN,—1879. ^a									
STATE AND COUNTIES.	SEX.	Children Born 1879.	Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
State	Total.....	34,122	15,884	11,369	3,956	2,039	142	c 72	d 204	84	e 392
	Males.....	17,757	8,225	5,939	2,023	1,088	79	36	103	41	218
	Females..	16,317	7,618	5,415	1,931	950	63	36	96	43	165
	Unknown	48	21	15	2	1	-----	-----	-----	-----	9
Alcona	Total.....	57	17	21	10	8	-----	-----	1	-----	-----
	Males.....	27	9	11	3	4	-----	-----	-----	-----	-----
	Females..	30	8	10	7	4	-----	-----	1	-----	-----
Allegan	Total.....	848	488	215	92	45	-----	1	3	-----	4
	Males.....	447	263	116	41	20	-----	1	2	-----	4
	Females..	400	224	99	51	25	-----	-----	1	-----	-----
	Unknown	1	1	-----	-----	-----	-----	-----	-----	-----	-----
Alpena	Total.....	211	28	132	28	22	-----	1	-----	-----	-----
	Males.....	120	18	75	13	13	-----	1	-----	-----	-----
	Females..	91	10	57	15	9	-----	-----	-----	-----	-----
Antrim	Total.....	130	57	25	31	15	2	-----	-----	-----	-----
	Males.....	66	28	11	20	7	-----	-----	-----	-----	-----
	Females..	64	29	14	11	8	2	-----	-----	-----	-----
Baraga	Total.....	53	18	27	6	1	-----	-----	1	-----	-----
	Males.....	30	11	14	4	1	-----	-----	-----	-----	-----
	Females..	23	7	13	2	-----	-----	-----	1	-----	-----
Barry	Total.....	511	399	43	39	23	2	-----	5	-----	-----
	Males.....	269	205	24	21	14	2	-----	3	-----	-----
	Females..	242	194	19	18	9	-----	-----	2	-----	-----
Bay	Total.....	960	236	501	136	82	-----	-----	1	2	2
	Males.....	514	125	268	72	47	-----	-----	1	1	-----
	Females..	446	111	233	64	35	-----	-----	-----	1	2
Benzie	Total.....	115	70	14	22	9	-----	-----	-----	-----	-----
	Males.....	61	38	6	11	6	-----	-----	-----	-----	-----
	Females..	53	32	7	11	3	-----	-----	-----	-----	-----
	Unknown	1	-----	1	-----	-----	-----	-----	-----	-----	-----

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

^b For counties and townships from which no returns of births were received, see Table XXI.

^c 1 male, mother "America."

^d 1 male, father "America."

^e 3 females "America."

TABLE VIII.—CONTINUED.—*Births by Counties, Parent-Nativity, and Sex.*

COUNTIES.	Sex.	Children Born, 1879.	NATIVITY OF PARENTS OF CHILDREN BORN,—1879. a								Both Unknown.
			Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
Berrien	Total.....	603	400	101	69	24	-----	-----	1	1	7
	Males.....	319	208	57	33	15	-----	-----	1	1	4
	Females.....	284	192	44	36	9	-----	-----	-----	-----	3
Branch	Total.....	474	369	43	26	14	0	-----	0	-----	10
	Males.....	253	192	26	13	12	4	-----	2	-----	4
	Females.....	219	175	17	13	2	2	-----	4	-----	6
Calhoun	Unknown.....	2	2	-----	-----	-----	-----	-----	-----	-----	-----
	Total.....	515	383	55	32	20	9	4	9	-----	3
	Males.....	255	191	26	16	10	4	2	5	-----	1
Cass	Females.....	259	192	29	16	10	5	2	4	-----	1
	Unknown.....	1	-----	-----	-----	-----	-----	-----	-----	-----	1
	Total.....	332	268	22	21	7	3	-----	6	-----	5
Charlevoix	Males.....	165	136	10	10	1	2	-----	1	-----	5
	Females.....	166	131	12	11	6	1	-----	5	-----	-----
	Unknown.....	1	1	-----	-----	-----	-----	-----	-----	-----	-----
Cheboygan	Total.....	174	95	43	24	10	-----	-----	1	-----	1
	Males.....	79	43	16	15	4	-----	-----	-----	-----	1
	Females.....	95	52	27	9	6	-----	-----	1	-----	-----
Chippewa	Total.....	175	40	81	33	17	-----	-----	1	1	2
	Males.....	88	19	39	19	8	-----	-----	1	1	1
	Females.....	86	21	41	14	9	-----	-----	-----	-----	1
Clare	Unknown.....	1	-----	1	-----	-----	-----	-----	-----	-----	-----
	Total.....	140	29	71	11	9	1	-----	4	1	14
	Males.....	75	18	34	6	3	-----	-----	4	1	9
Clinton	Females.....	65	11	37	5	6	1	-----	-----	-----	5
	Total.....	63	29	10	8	2	9	1	-----	-----	4
	Males.....	27	11	5	3	1	6	-----	-----	-----	1
Crawford	Females.....	36	18	5	5	1	3	1	-----	-----	3
	Total.....	494	328	68	60	23	5	-----	6	1	3
	Males.....	243	159	39	25	13	4	-----	2	-----	1
Crawford	Females.....	248	168	27	35	10	1	-----	4	1	2
	Unknown.....	3	1	2	-----	-----	-----	-----	-----	-----	-----
	Total.....	26	19	2	3	-----	-----	-----	-----	-----	2
Crawford	Males.....	14	9	1	2	-----	-----	-----	-----	-----	2
	Females.....	12	10	1	1	-----	-----	-----	-----	-----	-----

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

TABLE VIII.—CONTINUED.—*Births by Counties, Parent-Nativity, and Sex.*

COUNTIES.	SEX.	Children Born, 1879.	NATIVITY OF PARENTS OF CHILDREN BORN,—1879. ^a								
			Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
Delta	Total	133	18	78	25	10		2			
	Males	59	6	31	16	4		2			
	Females	74	12	47	9	6					
Eaton	Total	667	556	28	43	19	5		11		5
	Males	362	305	14	25	8	3		4		3
	Females	302	248	14	18	11	2		7		2
	Unknown	3	3								
Emmet	Total	150	103	15	14	10	4		2		2
	Males	80	56	6	7	5	2		2		2
	Females	70	47	9	7	5	2				
Genesee	Total	711	426	88	109	74		1	1		12
	Males	377	229	41	62	34			1		10
	Females	332	196	46	47	40		1			2
	Unknown	2	1	1							
Gladwin	Total	16	8	4	3	1					
	Males	5	3	1	1						
	Females	11	5	3	2	1					
Grand Traverse	Total	246	127	64	32	22			1		
	Males	133	71	33	14	14			1		
	Females	113	56	31	18	8					
Gratiot	Total	465	335	39	60	22	1	1	3		4
	Males	238	169	22	31	12	1		1		2
	Females	227	166	17	29	10		1	2		2
Hillsdale	Total	524	464	13	23	17	5		1		1
	Males	269	242	5	14	4	3		1		
	Females	253	220	8	9	13	2				1
	Unknown	2	2								
Houghton	Total	884	30	724	99	27		1		2	1
	Males	480	18	395	54	12		1			
	Females	404	12	329	45	15				2	1
Huron	Total	510	50	355	61	33		3	3	2	^b 3
	Males	260	20	190	33	15		1	1		
	Females	250	30	165	28	18		2	2	2	3

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

^b 2 females "America."

TABLE VIII.—CONTINUED.—*Births by Counties, Parent-Nativity, and Sex.*

		NATIVITY OF PARENTS OF CHILDREN BORN,—1879. ^a									
COUNTIES.	Sex.	Children Born, 1879.	Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
Ingham	Total.....	579	426	67	52	30	1	1	1	1	2
	Males.....	278	197	36	27	16	1	1	1	1	1
	Females.....	301	229	31	25	14	1	1	1	1	1
Ionia	Total.....	590	393	79	67	38	6	1	4	1	2
	Males.....	301	193	47	33	21	2	1	3	1	2
	Females.....	289	200	32	34	17	4	1	1	1	1
Iosco	Total.....	121	23	62	17	10	1	1	1	1	7
	Males.....	59	12	30	10	5	1	1	1	1	1
	Females.....	62	11	32	7	5	1	1	1	1	6
Isabella	Total.....	308	169	66	35	20	3	2	8	1	4
	Males.....	166	94	31	23	8	1	1	5	1	2
	Females.....	141	75	35	12	11	2	1	3	1	2
Isle Royal	Unknown.....	1	1	1	1	1	1	1	1	1	1
	Total.....	729	493	120	67	33	5	3	2	2	4
	Males.....	373	246	63	40	19	3	1	1	1	1
Jackson	Females.....	356	247	57	27	14	2	3	2	1	3
	Total.....	613	375	134	55	27	2	3	5	1	12
	Males.....	267	177	60	22	16	1	4	1	1	7
Kalamazoo	Females.....	322	197	71	33	11	2	2	1	1	5
	Unknown.....	4	1	3	1	1	1	1	1	1	1
	Total.....	63	34	10	9	9	1	1	1	1	1
Kalkaska	Males.....	29	16	6	4	3	1	1	1	1	1
	Females.....	34	18	4	5	6	1	1	1	1	1
	Total.....	1,605	752	547	195	88	2	4	9	1	8
Kent	Males.....	845	391	302	96	42	1	3	4	1	6
	Females.....	760	361	245	99	46	1	1	5	1	2
	Total.....	183	7	157	14	2	1	1	1	1	2
Keweenaw	Males.....	104	4	92	5	2	1	1	1	1	1
	Females.....	79	3	65	9	1	1	1	1	1	1
	Total.....	48	22	14	5	4	1	1	2	1	1
Lake	Males.....	24	16	4	3	1	1	1	1	1	1
	Females.....	24	6	10	2	3	1	1	2	1	1

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

^b No returns from County Clerk to State Department.

^c 1 male, father "America."

^d 1 female "America."

TABLE VIII.—CONTINUED.—*Births by Counties, Parent-Nativity, and Sex.*

COUNTIES.	SEX.	Children Born, 1879.	NATIVITY OF PARENTS OF CHILDREN BORN,—1879.*								
			Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
Lapeer.....	Total.....	602	287	176	82	72			2	2	1
	Males.....	309	130	100	40	37			1		1
	Females..	291	137	75	41	35			1	2	
	Unknown	2		1	1						
Leelanaw.....	Total.....	160	36	85	30	7	1			1	
	Males.....	81	18	46	12	3	1			1	
	Females..	79	18	39	18	4					
Lenawee.....	Total.....	681	480	107	65	19			9		1
	Males.....	350	242	53	37	13			5		
	Females..	330	238	53	28	6			4		1
	Unknown	1		1							
Livingston.....	Total.....	428	314	46	45	19	2	1	1		
	Males.....	231	170	23	25	10	2	1			
	Females..	197	144	23	20	9			1		
Mackinac.....	Total.....	25	14		3	2	1		4		1
	Males.....	11	6		1	1			3		
	Females..	14	8		2	1	1		1		1
Macomb.....	Total.....	601	279	210	66	37	4		1	2	2
	Males.....	296	150	92	38	13	2		1		
	Females..	305	129	118	28	24	2			2	2
Manistee.....	Total.....	398	79	245	40	28		2	2		2
	Males.....	214	45	131	20	16			1		1
	Females..	183	33	114	20	12		2	1		1
	Unknown	1	1								
Manitou.....	Total.....	25	4	9	9	2		1			
	Males.....	13	2	4	7						
	Females..	12	2	5	2	2		1			
Marquette.....	Total.....	770	55	634	44	15	1	3	2	1	15
	Males.....	398	20	338	19	8	1	2		1	9
	Females..	372	35	296	25	7		1	2		6
Mason.....	Total.....	219	86	88	26	16	3				
	Males.....	119	47	51	12	7	2				
	Females..	98	37	37	14	9	1				
	Unknown	2	2								

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

^b 1 male, mother "America."

TABLE VIII.—CONTINUED.—*Births by Counties, Parent-Nativity, and Sex.*

COUNTIES.	Sex.	Children Born, 1879.	NATIVITY OF PARENTS OF CHILDREN BORN,—1879. ^a								Both Unknown.
			Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
Mecosta.....	Total.....	37	151	92	51	31	1	-----	1	-----	-----
	Males.....	171	82	41	30	17	1	-----	-----	-----	-----
	Females..	158	69	51	21	14	-----	-----	1	-----	-----
Menominee.....	Total.....	87	24	43	10	9	1	-----	-----	-----	-----
	Males.....	41	12	21	4	3	1	-----	-----	-----	-----
	Females..	46	12	22	6	6	-----	-----	-----	-----	-----
Midland.....	Total.....	145	67	43	19	12	3	-----	-----	-----	1
	Males.....	68	33	17	9	5	3	-----	-----	-----	1
	Females..	77	34	26	10	7	-----	-----	-----	-----	-----
Missaukee.....	Total.....	29	10	13	4	2	-----	-----	-----	-----	-----
	Males.....	16	4	9	2	1	-----	-----	-----	-----	-----
	Females..	13	6	4	2	1	-----	-----	-----	-----	-----
Monroe.....	Total.....	812	548	137	86	30	3	2	3	-----	3
	Males.....	459	313	84	40	18	2	1	1	-----	-----
	Females..	351	233	53	46	12	1	1	2	-----	3
	Unknown	2	2	-----	-----	-----	-----	-----	-----	-----	-----
Montcalm.....	Total.....	622	367	95	62	25	18	9	6	-----	40
	Males.....	335	199	54	31	11	10	5	4	-----	21
	Females..	283	165	41	30	14	8	4	2	-----	19
	Unknown	4	3	-----	1	-----	-----	-----	-----	-----	-----
Muskegon.....	Total.....	485	152	258	37	32	-----	-----	-----	1	5
	Males.....	253	85	127	22	15	-----	-----	-----	-----	4
	Females..	231	67	130	15	17	-----	-----	-----	1	1
	Unknown	1	-----	1	-----	-----	-----	-----	-----	-----	-----
Newaygo.....	Total.....	258	149	44	33	17	11	-----	3	-----	1
	Males.....	137	82	19	19	9	5	-----	2	-----	1
	Females..	121	67	25	14	8	6	-----	1	-----	-----
Oakland.....	Total.....	591	384	78	69	52	-----	-----	4	1	3
	Males.....	301	187	42	33	34	-----	-----	2	-----	3
	Females..	290	197	36	36	18	-----	-----	2	1	-----
Oceana.....	Total.....	283	170	56	33	23	-----	-----	1	-----	-----
	Males.....	144	80	31	18	15	-----	-----	-----	-----	-----
	Females..	139	90	25	15	8	-----	-----	1	-----	-----

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

TABLE VIII.—CONTINUED.—*Births by Counties, Parent-Nativity, and Sex.*

COUNTIES.	SEX.	Children Born, 1879.	NATIVITY OF PARENTS OF CHILDREN BORN,—1879. ^a								Both Unknown.
			Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
Ogemaw	Total	11	5	3	1	1					
	Males	4		1	1	1				1	
	Females	7	5	2							
Ontonagon	Total	67	11	32	15	9					
	Males	33	6	13	8	6					
	Females	33	5	18	7	3					
	Unknown	1		1							
Osceola	Total	250	119	91	23	17					
	Males	130	65	43	14	8					
	Females	120	54	48	9	9					
Otsego	Total	25	12	7	1	1				4	
	Males	12	7	5							
	Females	13	5	2	1	1				4	
Ottawa	Total	851	349	338	108	46	1	4	2	3	
	Males	464	190	177	56	34	1	3		3	
	Females	387	159	161	52	12		1	2		
Presque Isle	Total	99	6	84	6	3					
	Males	48	3	40	3	2					
	Females	51	3	44	3	1					
Roscommon	Total	7	3					1		3	
	Males	6	2					1		3	
	Females	1	1								
Saginaw	Total	1,330	426	562	198	110	2	2	4	3	23
	Males	671	213	304	78	62		1	1	1	11
	Females	655	213	258	120	48	2	1	3	2	8
	Unknown	4									4
Sanilac	Total	701	89	438	97	70		3	1	3	
	Males	365	54	216	55	38		1	1		
	Females	336	35	222	42	32		2		3	
Schoolcraft	Total	4	3				1				
	Males	1					1				
	Females	3	3								

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

TABLE VIII.—CONTINUED.—*Births by Counties, Parent-Nativity, and Sex.*

NATIVITY OF PARENTS OF CHILDREN BORN,—1879. ^a											
COUNTIES.	Sex.	Children Born, 1879.	Both Native.	Both Foreign.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
							Father.		Mother.		
							Na- tive.	For- eign.	Na- tive.	For- eign.	
Shiawassee	Total.....	429	287	68	45	25	2	1	-----	-----	1
	Males.....	205	147	27	18	12	1	-----	-----	-----	-----
	Females..	221	139	39	27	13	1	1	-----	-----	1
	Unknown	3	1	2	-----	-----	-----	-----	-----	-----	-----
St. Clair	Total.....	1,044	275	448	307	103	1	1	-----	2	7
	Males.....	547	145	224	113	59	1	-----	-----	2	3
	Females..	495	130	223	94	44	-----	1	-----	-----	3
	Unknown	2	-----	1	-----	-----	-----	-----	-----	-----	1
St. Joseph	Total.....	445	329	62	30	16	1	-----	5	-----	2
	Males.....	241	181	35	12	9	-----	-----	4	-----	-----
	Females..	203	148	27	18	7	1	-----	1	-----	1
	Unknown	1	-----	-----	-----	-----	-----	-----	-----	-----	1
Tuscola	Total.....	590	253	148	124	64	-----	-----	1	-----	-----
	Males.....	330	132	85	71	41	-----	-----	1	-----	-----
	Females..	260	121	63	53	23	-----	-----	-----	-----	-----
Van Buren	Total.....	538	422	31	53	27	3	-----	1	-----	1
	Males.....	277	217	17	29	11	1	-----	1	-----	1
	Females..	261	205	14	24	16	2	-----	-----	-----	-----
Washtenaw	Total.....	609	347	132	84	33	4	2	5	1	1
	Males.....	310	179	68	37	20	3	-----	3	-----	-----
	Females..	299	168	64	47	13	1	2	2	1	1
Wayne	Total.....	4,373	1,109	2,291	494	230	6	10	44	50	144
	Males.....	2,307	580	1,200	253	126	2	7	24	27	86
	Females..	2,070	529	1,091	241	104	4	3	20	23	55
	Unknown	1	-----	-----	-----	-----	-----	-----	-----	-----	1
Wexford	Total.....	170	90	37	21	7	1	-----	2	1	2
	Males.....	78	49	14	10	3	1	-----	1	-----	-----
	Females..	91	50	23	11	4	-----	-----	1	1	1
	Unknown	1	-----	-----	-----	-----	-----	-----	-----	-----	1

^a "Native" includes only those born in the United States. Those cases in which the birthplace was returned as "America" were compiled with the "Unknown."

TWIN CHILDREN, 1879.

The returns of births show that 402 pairs of twins were born in Michigan in 1879. These 804 children are 2.36 per cent. of all the children returned as having been born during that year in this State.

Table IX. shows, by month and by sex, the number of twin children and the number of pairs of twins in 1879. The largest number were born in July, the smallest in November, according to this table.

TABLE IX.—*Exhibiting, by Sex, the Number of Pairs of Twins, and the Number of Twin Children Returned as having been Born in Michigan during the Year 1879, by Months Arranged in Order by Number; also, by Pairs and by Individuals, the Number of Males to 100 Females.*

YEAR AND MONTHS, 1879.		NUMBER OF TWIN CHILDREN, 1879.				NUMBER OF PAIRS OF TWINS, 1879.					
		Total.	Males.	Fe- males.	Males to 100 Fe- males.	Total.	Males.	Fe- males.	One of each Sex.	Males to 100 One of each Sex.	Males to 100 Fe- males.
Year, 1879.....		804	390	414	91	402	^a 127	^b 139	^c 136	93	91
More than the Av. No. of Twins.	July	92	45	47	93	46	14	15	17	82	93
	August	88	45	42	118	44	13	11	20	65	118
	March	80	35	45	67	40	10	15	15	67	67
	December.....	72	33	39	77	36	10	13	13	77	77
Average per month.....		68	33	35	91	34	11	12	11	100	92
Less than the Av. No. of Twins.	January	64	29	35	75	32	9	12	11	82	75
	February.....	62	34	28	130	31	13	10	8	163	130
	May	60	31	29	109	30	12	11	7	171	109
	April.....	58	30	28	110	29	11	10	8	138	110
	June.....	58	26	32	75	29	9	12	8	113	75
	October.....	58	24	34	58	29	7	12	10	70	58
	September.....	56	33	23	171	28	12	7	9	133	171
	November.....	56	24	32	64	28	7	11	10	70	64

^a 1 pair Black.

^b Half-pair unknown sex, unknown color.

^c 1 pair Mulatto.

TABLE X.—*Parent-Nativity of Twins Returned as having been Born in Michigan during the Year 1879.*

NATIVITY OF PARENTS OF TWINS, 1879.	PAIRS OF TWINS, 1879.							
	NUMBER.				PER CENT. OF EACH PAR- ENT-NATIVITY TO TOTAL OF ALL NATIVITIES.			
	Total.	Males.	Fe- males.	One of Each Sex.	Total.	Males.	Fe- males.	One of Each Sex.
All Nativities.....	402	127	139	186	100.00	100.00	100.00	100.00
Both Native.....	187	72	57	58	46.52	56.69	41.01	42.65
Both Foreign.....	115	24	44	47	28.61	18.89	31.65	34.56
Foreign Father and Native Mother.....	60	21	21	18	14.92	16.54	15.11	13.24
Foreign Mother and Native Father.....	34	7	15	12	8.46	5.51	10.79	8.81
Unknown Mother, Father Native.....								
Unknown Mother, Father Foreign.....								
Unknown Father, Mother Native.....								
Unknown Father, Mother Foreign.....	1		1		.25		.72	
Both Unknown.....	5	3	1	1	1.24	2.36	.72	.74
One or Both Native.....	281	100	93	88	69.90	78.74	66.90	64.70
One or Both Foreign.....	210	52	91	77	52.24	40.94	58.27	55.62

Exhibit 5 affords an opportunity to compare the number of twins by nativity and color of mothers, for the years 1872-1879. In the third column for each year the per cents. are shown, and it may be seen that the per cent. of births of twins to all mothers is larger among the foreign-born mothers in each year excepting 1876 and 1879.

EXHIBIT 5.—*By Nativity and by Color of Mothers, the Number and Proportion of Twin Births Returned as having occurred in Michigan during the Years 1877 to 1879, inclusive.*

NATIVITY AND COLOR OF MOTHERS OF TWINS.	1877.			1878.			1879.		
	Pairs of Twins.	Whole Number of Mothers, Including those of Twins.	Per Ct. of Births of Twins to all Mothers.	Pairs of Twins.	Whole Number of Mothers, Including those of Twins.	Per Ct. of Births of Twins to all Mothers.	Pairs of Twins.	Whole Number of Mothers, Including those of Twins.	Per Ct. of Births of Twins to all Mothers.
Mothers of all Colors and all Nationalities.....	367	33,028	1.11	427	34,729	1.23	402	33,716	1.19
All Native Mothers.....	207	15,891	1.10	242	20,143	1.20	247	19,777	1.25
All Foreign Mothers.....	150	13,449	1.12	173	13,887	1.25	150	13,338	1.12
Mothers of Unknown Nationalities.....	10	688	1.45	12	729	1.65	5	601	.83
White.....	360	32,445	1.11	420	34,290	1.22	400	33,325	1.20
Black.....	1	101	.99	2	123	1.63	1	132	.76
Mulatto.....		87		4	77	5.19	1	95	1.05
Indian.....	2	128	1.56	1	159	.63		122	
Unknown.....	4	267	1.60		80			42	
Black and Mulatto.....	1	188	.53	6	200	3.00	2	227	.88

TABLE XI.—*Parent-Nativity of Twins Returned as having been Born in Michigan during the Year 1879,—distinguishing between Parents who were Natives of the same State and those Born in Different States or Countries.*

NATIVITY OF PARENTS OF TWINS, 1879.	PAIRS OF TWINS, 1879.							
	NUMBER.				PER CENT. OF EACH PARENT-NATIVITY TO TOTAL OF ALL NATIVITIES.			
	Total.	Males.	Females.	One of Each Sex.	Total.	Males.	Females.	One of Each Sex.
All Nationalities.....	402	127	139	136	100.00	100.00	100.00	100.00
Same American State or Foreign Country.....	200	55	74	71	49.75	43.31	53.24	52.21
Different American States or Foreign Countries.....	102	41	27	34	25.37	32.28	19.42	25.00
Foreign Father and Native Mother.....	60	21	21	18	14.93	16.54	15.11	13.24
Foreign Mother and Native Father.....	34	7	15	12	8.46	5.51	10.79	8.82
Unknown Mother, Father Native.....								
Unknown Mother, Father Foreign.....								
Unknown Father, Mother Native.....								
Unknown Father, Mother Foreign.....	1		1		.25		.72	
Both Unknown.....	5	3	1	1	1.24	2.36	.73	.73
Different States or Countries..... ^a	196	69	63	64	48.76	54.33	45.32	47.06

^a Includes "Different American States or Foreign Countries," "Foreign Father and Native Mother," and "Foreign Mother and Native Father." Compare with "Same American State or Foreign Country," and with same lines in Table XV.,—for still-born children.

TABLE XII.—*Exhibiting, for the State and Counties, by Sex, the number of Pairs of Twins, the Number of Twin Children, and the Nativity of Parents of Twins Returned as having been Born in Michigan during the Year 1879. Nativity stated by Pairs of Twins.*

STATE AND COUNTIES.		SEX.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879. ^a												
					NATIVE.		FOREIGN.		Foreign Father and Native Mother.		Foreign Mother and Native Father.		MOTHER UNK.		FATHER UNK.		Both known.
					Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.					Father.		Mother.		
									Native.	Foreign.	Native.	Foreign.	Native.	Foreign.			
State	Total		804	402	97	90	103	12	60	34				1	5		
	Males		390	127	b 34	c 38	b 21	3	d 21	e 7					f 3		
	Females		414	139	g 35	h 22	i 39	5	j 21	15				1	1		
	One of each			136	k 28	l 30	m 43	e 4	n 18	o 12					1		
Allegan	Total		20	10	2	6	2										
	Males		11	3		3											
	Females		9	2	1	1											
	One of each			5	1	e 2	2										
Alpena	Total		4	2	1				1								
	Males		2	1	1												
	Females		2	1					1								
Antrim	Females		2	1		1											
Barry	Total		12	6	1	5											
	Males		6	2		2											
	Females		6	2	1	p 1											
	One of each			2		2											
Bay	Total		22	11		2	4	1	1	3							
	Males		10	4		1	2	1									
	Females		12	5			2		1	2							
	One of each			2		1				1							
Benzie	Males		2	1	1												
Berrien	Total		24	12	2	4	1		4					1			
	Males		9	1			1										
	Females		15	4	1	1			1					1			
	One of each			7	1	3			13								

* See foot-note a to Table VIII.

c 2 males still-born.

e 1 pair still-born.

g 2 pairs and 3 females still-born.

i 1 pair and 2 females still-born.

j 2 pairs still-born.

l 2 pairs and 1 female still-born.

m 2 pairs, 1 male, and 1 female still-born.

o 1 pair Mulatto.

b 4 pairs still-born.

d 1 pair and 1 male still-born, and 1 pair Black.

f 1 pair illegitimate.

h 2 pairs and 2 females still-born, and a twin to

one of the pairs, unknown sex, unknown color.

k 1 pair, 1 male, 1 female still-born, and 1 pair illegitimate.

n 3 pairs still-born.

p 1 female still-born.

TABLE XII.—CONTINUED.—*Parent-Nativity of Twins.*

COUNTIES.	SEX.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879. ^a										
				NATIVE.		FOREIGN.		MOTHER UNK.		FATHER UNK.		Both Unknown.		
				Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	Father.			Mother.	
										Native.	Foreign.		Native.	Foreign.
Branch	Total	14	7	2	5									
	Males	8	3	1	2									
	Females	6	2	1	b 1									
	One of each		2		2									
Calhoun	Total	18	9	5	3	1								
	Males	11	3	2	1									
	Females	7	1	1										
	One of each		5	2	2	1								
Cass	Total	10	5	2	2									1
	Males	4	2		1									1
	Females	6	3	c 2	1									
	One of each		2	1	1									
Charlevoix	Total													
	Males	1												
	Females	1												
	One of each		1	b 1										
Cheboygan	Females	2	1			1								
Chippewa	Males	2	1			b 1								
Clinton	Total	6	3		2	1								
	Males	3	1		1									
	Females	3	1		1									
	One of each		1			1								
Delta	Total	4	2					1	1					
	Males	2	1					1						
	Females	2	1						1					
Eaton	Total	10	5	1	3		1							
	Males	6	2	1	d 1									
	Females	4	1		1									
	One of each		2		b 1		1							
Emmet	Males	2	1						b 1					
Genesee	Total	20	10	5	2	1			1					1
	Males	13	6	3	1				1					1
	Females	7	3	b 2	c 1									
	One of each		1			b 1								

^a See foot-note ^a to Table VIII.
^c 1 female still-born.

^b 1 pair still-born.
^d 1 male still-born.

TABLE XII.—CONTINUED.—*Parent-Nativity of Twins.*

COUNTIES.	Sex.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879. ^a										Both Unknown.
				NATIVE.		FOREIGN.		Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		
				Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.			Father.		Mother.		
										Native.	Foreign.	Native.	Foreign.	
Grand Traverse	Total.....	6	3		1	1			1					
	Males.....	3	1		1									
	Females.....	3	1						1					
	One of each.....		1			b 1								
Gratiot	Total.....	20	10	6	1	1		1	1					
	Males.....	11	5	2		1		1	1					
	Females.....	9	4	3	1									
	One of each.....		1	1										
Hillsdale	Total.....	10	5	4					1					
	Males.....	7	2	2										
	Females.....	3												
	One of each.....		3	2					1					
Houghton	Total.....	16	8			7		1						
	Males.....	8	1			1								
	Females.....	13	6			c 5		b 1						
	One of each.....		1			1								
Huron	Females.....	2	1					1						
Ingham	Total.....	18	9	4	2	1		2						
	Males.....	9	3	1	1			b 1						
	Females.....	9	3	1	1			b 1						
	One of each.....		3	2		c 1								
Ionia	Total.....	6	3	1	2									
	Males.....	2												
	Females.....	4	1		1									
	One of each.....		2	1	1									
Iosco	Total.....	4	2			1		1						
	Males.....	1												
	Females.....	3	1					1						
	One of each.....		1			1								
Isabella	Total.....	4	2	1	1									
	Males.....	2	1	1										
	Females.....	2	1		1									

^a See foot-note ^a to Table VIII.^b 1 pair still-born.^c 1 female still-born.

TABLE XII.—CONTINUED.—*Parent-Nativity of Twins.*

COUNTIES.	SEX.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879.*										
				NATIVE.		FOREIGN.		Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
				Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.			Father.	Mother.			
												Native.	Foreign.	
Jackson	Total.....	20	10	4	4			1	1					
	Males.....	10	4		3			1						
	Females.....	10	4	3					1					
	One of each.....		2	1	1									
Kalamazoo	Total.....	18	9	1	4	3								
	Males.....	9	2		2									
	Females.....	9	2			2								
	One of each.....		5	1	2	1								
Kalkaska	Total.....	6	3	1	1			1						
	Males.....	2												
	Females.....	4	1		1									
	One of each.....		2	1				1						
Kent	Total.....	28	14	3	4	4		3						
	Males.....	14	3	1	1	1								
	Females.....	14	3	1	1			1						
	One of each.....		8	1	2	3		2						
Lake	Total.....	4	2		2									
	Males.....	4	2		2									
	Females.....	12	4	2				1						
	One of each.....		4	1	1	1		1						
Lapeer	Total.....	4	2			2								
	Males.....	4												
	Females.....	12	4	2				1					1	
	One of each.....		4	1	1	1		1						
Leelanaw	Total.....	4	2			2								
	Males.....	2	1			1								
	Females.....	3	1			1								
	One of each.....													
Lenawee	Total.....	18	9	2	4	2		1						
	Males.....	12	5		3	1								
	Females.....	6	2	1		1								
	One of each.....		2	1	1									
Livingston	Total.....	4	2	1	1									
	Males.....	2	1		1									
	Females.....	2	1	1										
	One of each.....													

* See foot-note a to Table VIII.
 † 1 female still-born.
 • 1 pair illegitimate.
 ‡ 1 pair still-born.

TABLE XII.—CONTINUED.—*Parent-Nativity of Twins.*

COUNTIES.	SEX.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879. a											
				NATIVE.		FOREIGN.				MOTHER UNKNOWN.		FATHER UNKNOWN.		Both Unknown.	
				Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.	Foreign Father and Native Mother.	Foreign Mother and Native Father.	Father.		Mother.			
										Native.	Foreign.	Native.	Foreign.		
Macomb.....	Total.....	6	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Males.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	5	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	One of each.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manistee.....	Total.....	8	4	1	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....
	Males.....	5	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	One of each.....	.....	3	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Marquette.....	Total.....	8	4	.....	.....	3	.....	.....	1	.....	.....	.....	.....	.....	.....
	Males.....	3	1	.....	.....	b 1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	5	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	One of each.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mason.....	Total.....	8	4	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Males.....	3	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	5	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	One of each.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mecosta.....	Total.....	6	3	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....
	Males.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	5	2	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
	One of each.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Menominee.....	Total.....	4	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Males.....	3	1	b 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	One of each.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Midland.....	Total.....	6	3	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Males.....	3	1	b 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	3	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	One of each.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monroe.....	Total.....	14	7	4	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
	Males.....	10	5	b 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Females.....	4	2	.....	b 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

^a See foot-note ^a to Table VIII.^b 1 pair still-born.

TABLE XII.—CONTINUED.—*Parent-Nativity of Twins.*

COUNTIES.	SEX.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879. ^a										
				NATIVE.		FOREIGN.		Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
				Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.			Father.		Mother.		
										Native.	Foreign.	Native.	Foreign.	
Montcalm.....	Total.....	8	4		1		2	1						
	Males.....	4	1		1									
	Females.....	4	1				1							
	One of each.....		2				1	1						
Muskegon.....	Total.....	10	5			2	1	1	1					
	Males.....	7	2				1	1						
	Females.....	3												
	One of each.....		3			2			1					
Newaygo.....	Total.....	12	6		2	2		2						
	Males.....	2												
	Females.....	10	4		2	2								
	One of each.....		2					2						
Oakland.....	Total.....	16	8	5		1		1	1					
	Males.....	10	4	2					1	1				
	Females.....	6	2	2										
	One of each.....		2	1		1								
Oceana.....	Total.....	12	6	1	1	3		1						
	Males.....	6	2		1	1								
	Females.....	6	2	1				1						
	One of each.....		2			2								
Ontonagon.....	Females.....	2	1			1								
Osceola.....	Total.....	4	2		1			1						
	Males.....	3	1		1									
	Females.....	1												
	One of each.....		1					1						
Ottawa.....	Total.....	26	13	2	2	4		2	3					
	Males.....	10	2		1				1					
	Females.....	16	5	1		2		1	1					
	One of each.....		6	1	1	2		1	1					
Presque Isle.....	Males.....	2	1			1								

^a See foot-note ^a to Table VIII.^b 1 female still-born.^c 1 male still-born.^d 1 pair still-born.

TABLE XII.—CONTINUED.—*Parent-Nativity of Twins.*

COUNTIES.	SEX.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879. ^a										
				NATIVE.		FOREIGN.		Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.		FATHER UNK.		Both Unknown.
				Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.			Father.		Mother.		
										Native.	Foreign.	Native.	Foreign.	
Saginaw.....	Total.....	42	21	3	4	8	1	4	1					
	Males.....	22		1	2	2	1	2						
	Females.....	20	7	1		4		1	1					
	One of each.....		6	1	2	2		1						
Sanilac.....	Total.....	12	6		1	3			2					
	Males.....	6	2		1				1					
	Females.....		2			2								
	One of each.....		2			1								
Shiawassee.....	Total.....	6	3	1	1	1								
	Males.....	2	1		1									
	Females.....	4	2	1		1								
	One of each.....													
St. Clair.....	Total.....	38	19	4		8	1	4	2					
	Males.....	15	4	2				2						
	Females.....	23	8	1		3	1	2						
	One of each.....		7	1		5								
St. Joseph.....	Total.....	6	3		2			1						
	Males.....	4	1					1						
	Females.....	2												
	One of each.....		2		2									
Tuscola.....	Total.....	30	15	5	1	1		6	2					
	Males.....	19	7	3		1		3						
	Females.....	11	3	1	1			1						
	One of each.....		5	1				2	2					
Van Buren.....	Total.....	8	4	1	3									
	Males.....	3												
	Females.....	5	1		1									
	One of each.....		3	1	2									
Washtenaw.....	Total.....	12	6	3		1		2						
	Males.....	4	2	1		1								
	Females.....	8	4	2				2						
	One of each.....													

^aSee foot-note a to Table VIII.^b1 male still-born.^c1 pair still-born.^d1 pair illegitimate.^e1 female still-born.

TABLE XII.—CONTINUED.—*Parent-Nativity of Twins.*

COUNTIES.	SEX.	Number of Individuals.	Number of Pairs of Twins.	NATIVITY OF PARENTS OF TWINS, 1879.*										
				NATIVE.		FOREIGN.		Foreign Father and Native Mother.	Foreign Mother and Native Father.	MOTHER UNK.	FATHER UNK.			
				Both Parents from Same State.	From Different States.	Both from Same Country.	From Different Countries.			Father.		Mother.		
										Native.	Foreign.	Native.	Foreign.	Both Unknown.
Wayne.....	Total.....	114	57	8	1	24	5	10	8					1
	Males.....	50	15	2	1	5		5	1					1
	Females.....	64	22	3		10	3	2	4					
	One of each.....		20	3		9	2	3	3					
Wexford.....	Total.....	4	2	1	1									
	Males.....	3	1	1										
	Females.....	1												
	One of each.....		1		1									

* See foot-note a to Table VIII.

b 1 pair still-born.

c 1 male still-born.

d 1 pair illegitimate.

e 1 female still-born.

TABLE XIII.—*Occupations of Fathers of Twins Born in Michigan during the Year 1879, according to the Returns.*

OCCUPATIONS.	Number of Each.	OCCUPATIONS.	Number of Each.
ALL OCCUPATIONS.....	402	Fruit-growers.....	4
Assistant Engineer, Fire Dep.....	1	Grocers.....	4
Barbers.....	1	Jobbers.....	2
Blacksmiths.....	4	Laborers.....	77
Book-keepers.....	1	Land Agents.....	1
Brakemen.....	1	Lawyers.....	1
Butchers.....	1	Liquor Merchants.....	1
Cabinet-makers.....	1	Lumber Dealers.....	1
Carpenters.....	17	Lumbermen.....	2
Chair-makers.....	1	Machinists.....	1
Cigar-makers.....	1	Mail Carriers.....	1
Clerks.....	3	Manufacturers.....	1
Engineers.....	4	Mariners.....	1
Farm-hands.....	2	Masons.....	4
Farmers.....	208	Mechanics.....	4
		Merchants.....	3

TABLE XIII.—CONTINUED.—*Occupations of Fathers of Twins.*

OCCUPATIONS.	Number of Each.	OCCUPATIONS.	Number of Each.
Millers.....	1	Salesmen.....	1
Mill-wrights.....	1	Saloon-keepers.....	2
Miners.....	5	Shingle-weavers.....	1
Painters.....	3	Ship-carpenters.....	1
Paper Dealers.....	1	Shoe-makers.....	3
Peddlers.....	2	Stone-cutters.....	1
Physicians.....	3	Stone-masons.....	1
Plumbers.....	1	Stove-fitters.....	1
Police-men.....	1	Tailors.....	1
Professors.....	1	Teamsters.....	3
R. R. Laborers.....	1	Thrashers.....	1
R. R. Men.....	1	Traveling Agents.....	1
"Restaurants".....	1	Type-setters.....	1
"Rollers".....	1	Unknown.....	3
Saddlers.....	1	Wood-turners.....	1
Sailors.....	2		

TRIPLET CHILDREN, 1879.

Only two sets of triplets were returned for the year 1879, the birth of one of which occurred in November, and one in December. It may be seen that each parent of each set was foreign-born. In one case the children were all females, in the other, all males.

TABLE XIX.—*Exhibiting the Details concerning Triplet Children Returned as having been born in Michigan during the Year 1879.*

COUNTIES.	TRIPLET CHILDREN, 1879.				PARENTS OF TRIPLETS, 1879.		
	Month of Birth, 1879.	Color.	SEX.		Birthplace of Father.	Birthplace of Mother.	Occupation of Father.
			Males.	Females.			
Barry.....	Nov.....	White...	.....	3	England..	England..	Farmer...
Chippewa.....	Dec.....	White...	3	.....	Canada....	Canada....	Farmer....

STILL-BORN CHILDREN, 1879.

In Exhibit 6 may be seen the number of children born, the number of still-births, and the per cent. of still-born children to all children born, for each of the years 1877-1879. In 1879 the number of still-births was larger than in any other year, the year 1878 excepted, 749 still-born children being returned for the year 1879. There seems to be a general increase in the proportion of still-births in this State from the year 1872 to 1879.

EXHIBIT 6.—*The Relation of Still-births to all Children Returned as having been Born in Michigan during the several Years 1874 to 1879, inclusive, and of the Mothers of Still-born Children to all Mothers Returned as having Borne Children during each of the Years 1874 to 1879, inclusive.*

CHILDREN AND MOTHERS.	TOTAL BIRTHS AND STILL-BIRTHS.					
	1874.	1875.	1876.	1877.	1878.	1879.
All Children born.....	31,151	31,958	34,235	33,395	35,162	34,122
Still-born Children.....	464	629	640	720	793	749
Per Cent. of Still-born to Total.....	1.49	1.97	1.89	2.15	2.26	2.20
All Mothers.....	30,739	31,586	33,791	33,028	34,729	33,716
Mothers of Still-born Children.....	454	613	620	697	765	723
Per Cent. of Mothers of Still-born Children to All Mothers.....	1.48	1.94	1.83	2.11	2.20	2.14

Exhibit 7 is a similar showing for still-births to Exhibit 5 for twins; and by Exhibit 7 it is seen that the per cent. of mothers of still-births to all mothers is considerably greater among the foreign-born mothers for each of the years 1877-1879. While the foreign-born mothers seem to be more productive, it is also shown to be a fact that a larger proportion of their children are born dead.

EXHIBIT 7.—*By Nativity and Color, the Number and Proportion of Mothers having Still-births in Michigan during each of the Years 1877-1879, inclusive, according to the Returns.*

NATIVITY AND COLOR OF MOTHERS.	1877.			1878.			1879.		
	Moth- ers hav- ing Still- births.	Whole No. of Moth'rs, includ- ing those of Still- births.	Per Cent. of Mothers of Still- births to all Moth'rs.	Moth- ers hav- ing Still- births.	Whole No. of Moth'rs, includ- ing those of Still- births.	Per Cent. of Mothers of Still- births to all Moth'rs.	Moth- ers hav- ing Still- births.	Whole No. of Moth'rs, includ- ing those of Still- births.	Per Cent. of Mothers of Still- births to all Moth'rs.
Mothers of all colors and all nativities.....	697	33,028	2.11	765	34,729	2.20	723	33,716	2.14
All native mothers.....	337	18,891	1.78	358	20,143	1.78	367	19,777	1.86
All foreign mothers.....	286	13,449	2.12	321	13,857	2.32	280	13,338	2.10
Mothers of unknown nativities.....	74	688	10.76	86	729	11.80	76	601	12.65
White.....	677	32,445	2.08	747	34,290	2.18	706	33,325	2.12
Black.....	1	101	.99	3	123	2.44	4	132	3.03
Mulatto.....	3	87	3.45	4	77	5.19	2	95	2.11
Indian.....	4	128	3.13	-----	159	-----	1	122	.82
Unknown.....	12	267	4.49	11	80	13.75	10	42	23.81
Black and Mulatto.....	4	188	2.13	7	200	3.50	6	227	2.64

EXHIBIT 11.—Occupations of Fathers of Still-born Children in Michigan in 1879, according to the Returns.

FATHERS.				FATHERS.			
CHILDREN.				CHILDREN.			
OCCUPATIONS.	Males.	Fe- males.	Unk.	OCCUPATIONS.	Males.	Fe- males.	Unk.
Accountants.....		1		Marble Dealers.....	1		
Agents.....	1			Masons.....		3	
Attorneys at Law.....	1			Mechanics.....	1	1	
Barbers.....	3	1		Merchants.....	11	5	
Bar-tenders.....		1		Millers.....	2	2	
Blacksmiths.....	7	1		Miners.....	9	13	
Boarding-house keepers.....		1		Ministers.....	2		
Butchers.....	3	3		Money-lenders.....	1		
Cabinet-makers.....	2	1		Moulders.....	2		
Carpenters.....	14	9	1	Musicians.....		1	
Carpenters and Joiners.....		1		Opticians.....	1		
Carriage-makers.....	1			Painters.....	1	3	
"Charcoal".....	1			Pawn brokers.....	1		
Cigar-makers.....		1		Peddlers.....		1	
Civil Engineers.....		1		Photographers.....		1	
Clerks.....	2	4		Physicians.....	2	1	
Collectors of Customs.....		1		Plumbers.....		3	
Conductors.....		1		Printers.....	1	1	
Confectioners.....	1	1		R. R. Agents.....	2		
Coopers.....		2		R. R. Employees.....		1	
Dealers.....	1			Railroading.....		2	
Deputy Sheriffs.....		1		"Rea Estate.....		1	
Drovers.....		1		Sailors.....	4		
Druggists.....	1			Saloon-keepers.....	5	2	
Editors.....		1		Saw-milling.....	1		
Engineers.....	5	3		Scissors-grinders.....	1		
Farmers.....	187	132	16	Shipping Clerks.....	1		
Farm Hands.....		2		Shoe-makers.....	2	2	
Farm Laborers.....		2		Silversmiths.....	1		
Foremen.....	1			Smelters.....	1		
Grocers.....		1		Stone-cutters.....	1		
Hotel-keepers.....	2			Tailors.....	2	3	
Laborers.....	85	45	5	Teamsters.....	2	2	
Lawyers.....		1		Tinsmiths.....	1		
Liquor Dealers.....	1			Tobacconists.....	1		
Lumbermen.....	4			Tramps.....		1	
Machinists.....		1		"U. S. Lake Survey Office".....		1	
Mail Carriers.....	1			Unknown.....	34	28	6
Mail-case Manufacturers.....		1		Upholsterers.....	1		
Man'f'r Musical Instruments.....	1			Watchmen.....	1		
Manufacturers.....		1		Well-diggers.....	2		

TABLE XV.—*Parent-Nativity of Still-born Children,—Exhibiting, by Sex, the Number and Per Cent. of Total Number Returned as having been Born in Michigan during the Year 1879, of Parents who were Natives of the Same and of Different States or Countries.*

NATIVITY OF PARENTS OF STILL-BORN CHILDREN, 1879.	STILL-BORN CHILDREN, 1879.							
	NUMBER.				PR. CT. OF EACH PARENT-NATIVITY TO TOTAL OF ALL NATIVITIES.			
	Total.	Males.	Females.	Un-kno'n.	Total.	Males.	Females.	Un-known.
All Nativities.....	749	423	298	28	100.00	100.00	100.00	100.00
Same American State or Foreign Country.....	414	250	150	14	55.27	59.10	50.34	50.00
Different American States or Foreign Countries.....	152	a 69	b 77	6	20.29	16.31	25.84	21.48
Foreign Father and Native Mother.....	68	40	27	1	9.08	9.45	11.06	3.57
Foreign Mother and Native Father.....	31	17	14	—	4.14	4.02	4.70	—
Unknown Mother, Father Native.....	7	4	3 ^a	—	.93	.95	1.01	—
Unknown Mother, Father Foreign.....	5	4	1	—	.67	.95	.33	—
Unknown Father, Mother Native.....	3	2	1	—	.40	.47	.33	—
Unknown Father, Mother Foreign.....	5	4	1	—	.67	.95	.34	—
Both unknown.....	64	33	24	7	8.54	7.80	8.05	25.00
Different States or Countries.....	251	126	118	7	33.51	29.79	39.60	25.00
Native.....	313	166	137	10	41.79	39.24	45.97	35.71
Foreign.....	253	153	90	10	33.78	36.17	30.20	35.71

^a Includes 3 "Europe."

^b Includes 1 "Europe."

TABLE XIV.—*Exhibiting, by Sex, the Parent-Nativity, and by Sex and Months, the Number of Still-births in Michigan during the Year 1879, according to the Returns.*

SEX.	YEAR, 1879.	MONTHS, 1879.												NATIVITY OF PARENTS OF STILL-BIRTHS, 1879.																
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	PARENTS BORN IN MICHIGAN.	NATIVE.			FOREIGN.				MOTHER UNK.		FATHER UNK.						
															Father.	Mother.	Total.	Same State.	Different States.	Total.	Same Country.	Different Coun-tries.	Unknown.	Foreign Mother and Na-tive Father.	Foreign Father and Na-tive Mother.	Native.	Foreign.	Both Unknown.		
Total.....	749	54	52	66	58	53	59	63	53	71	69	64	85	2	181	225	313	186	127	253	228	21	4	68	31	7	5	3	5	64
Males.....	423	33	34	54	27	34	36	36	30	43	39	34	43	...	95	116	166	109	57	153	141	9	53	40	17	4	4	2	4	33
Females..	298	19	16	31	29	16	20	24	20	26	28	28	40	2	82	103	137	72	65	90	76	11	61	27	14	3	1	1	1	24
Unknown	28	3	2	1	2	3	3	3	3	2	2	2	2	...	4	5	10	5	5	10	9	1	...	1	...	...	...	...	...	7

^a 10 pairs, 3 half pairs male twins, 7 pairs, 7 half pairs female twins and 9 pairs 2 male and 3 females, one of each sex; 3 males and 1 female Black, 1 male and 1 female Malatto; 1 female Indian; and 1 male and 8 unknown sex, unknown color.

^b "Europe."

^c 1 mother, "America."

ILLEGITIMATE CHILDREN, 1879.

Great care should be taken to collect and return all the facts called for by our blanks concerning illegitimate children. During the year 1879, according to the returns, 292 illegitimates were born in Michigan, which is .86 per cent. of all the children returned as having been born in the State during that year. The proportion of illegitimate children in 1879 was only a little above the average for the years 1872-1879. The statistics concerning the parents of illegitimate children are very meagre, the nativity of nearly a quarter of the mothers and of more than four-fifths of the fathers being "unknown."

EXHIBIT 8.—*The Relation* of the Illegitimate Children to All Children Returned as having been Born during the several Years 1874 to 1879, inclusive, and of Mothers of Illegitimates to All Mothers Returned as having Borne Children in Michigan during the Years 1874 to 1879, inclusive.*

CHILDREN AND MOTHERS.	TOTAL BIRTHS AND ILLEGITIMATES.					
	1874.	1875.	1876.	1877.	1878.	1879.
All Children born.....	31,151	31,958	34,235	33,395	35,162	34,122
Illegitimate Children.....	236	193	266	316	* 202	292
Per Cent. of Illegitimates to Total.....	.76	.60	.78	.95	.57	.86
All Mothers.....	30,739	31,586	33,791	33,028	34,729	33,716
Mothers of Illegitimate Children.....	236	192	262	312	* 202	289
Per Cent. of Mothers of Illegitimates to All Mothers.....	.77	.61	.78	.94	.58	.86

* The number of illegitimates returned for Wayne county for 1878 is probably too small by about 70 births. Heretofore the children born in the "Foundlings' Home," in the ninth ward of Detroit, have generally been returned as illegitimate; but we are unable to get any such statement for 1880, although there is no doubt that those children whose fathers' names are reported "Unknown" (the mothers' names being given), in the said ninth ward, are illegitimate.

EXHIBIT 9.—By Nativity and Color, the Number and Proportion of Mothers of Illegitimate Children Returned as having been Born in Michigan during the Years 1877 to 1879, inclusive.

NATIVITY AND COLOR OF MOTHERS.	1877.			1878.			1879.		
	Moth-ers hav- ing Il- legiti- mates.	Whole No. of Mothers includ- ing those of Illegiti- mates.	Per Ct. of Moth- ers of Illegiti- mates to all Moth'rs.	Moth- ers hav- ing Il- legiti- mates.	Whole No. of Mothers includ- ing those of Illegiti- mates.	Per Ct. of Moth- ers of Illegiti- mates to all Moth'rs.	Moth- ers hav- ing Il- legiti- mates.	Whole No. of Mothers includ- ing those of Illegiti- mates.	Per Ct. of Moth- ers of Illegiti- mates to all Moth'rs.
Mothers of all colors and all na- tivities.....	312	33,028	.94	a 202	34,729	.58	289	33,716	.86
All Native Mothers.....	100	19,891	.85	114	20,143	.57	138	19,777	.69
All Foreign Mothers.....	79	13,449	.59	34	13,857	.25	89	13,335	.67
Mothers of unknown nativities.	73	688	10.61	54	729	7.41	64	601	10.65
White.....	286	32,445	.88	179	34,200	.52	266	33,325	.80
Black.....	6	101	5.94	7	123	5.69	7	132	5.30
Mulatto.....	4	87	4.60	3	77	3.90	4	95	4.21
Indian.....	15	128	11.72	11	159	6.92	b 11	122	9.02
Unknown.....	1	207	.37	2	80	2.50	1	42	2.38
Black and Mulatto.....	10	188	5.32	10	200	5.00	11	227	4.35

* See foot-note * to Exhibit 8, page 57.

b 1 female half Indian; 1 male, 2 females White and Indian.

TABLE XVIII.—Exhibiting the Number of Males to 100 Females, and by Sex, the Number and Per Cent. of Total Number of Illegitimate Children Born of Native and of Foreign-born Parents, in Michigan, during the Year 1879, according to the Returns.

NATIVITY OF PARENTS OF ILLEGITIMATE CHILDREN, 1879.		ILLEGITIMATE CHILDREN, 1879.								
		Number of Males to 100 Fe- males.	NUMBER.				PER CENT. OF TOTAL.			
			Total.	Males.	Fe- males.	Unk.	Total.	Males.	Fe- males.	Unk.
All Nativities.....		109	292	152	139	1	100.00	100.00	100.00	100.00
Mothers.....	Native.....	104	137	70	67	-----	46.92	46.05	48.20	-----
	Foreign.....	88	90	42	48	-----	30.82	27.63	34.53	-----
	Unknown.....	167	65	40	24	1	22.26	26.31	17.26	100.00
Fathers.....	Native.....	81	29	13	16	-----	9.93	8.55	11.51	-----
	Foreign.....	118	24	13	11	-----	8.22	8.55	7.91	-----
	Unknown.....	113	239	126	112	1	81.85	82.89	80.58	100.00

BIRTHS OF ILLEGITIMATE CHILDREN.

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TABLE XVII.—*Exhibiting, by Color and by Sex, the Number of Illegitimate Children Returned as having been Born in Michigan during the Year 1879; also the Per Cent. of Each Sex to the Total of Both Sexes.*

COLOR OR RACE.	Sex.	Total Illegiti- mate Births, 1879.	Per Cent. of Each Sex to Total of Both Sexes.
All Colors	Total	292	
	Males	152	52.23
	Females	139	47.77
	Unknown	1	
White	Total	269	
	Males	142	52.99
	Females	126	47.01
	Unknown	1	
Black	Total	7	
	Males	5	71.43
	Females	2	28.57
Mulatto	Total	4	
	Males		
	Females	4	100.00
Indian	Total	11	
	Males	4	36.36
	Females	7	63.64
Unknown	Total	1	
	Males	1	100.00
	Females		
Black and Mulatto	Total	11	
	Males	5	45.45
	Females	6	54.55

TABLE XVI.—*Exhibiting, by Sex, the Total Number, Number by Months, and the Nativity of Parents of Illegitimate Children Born in Michigan, during the Year ending December 31, 1879, according to the Returns.*

SEX.	YEAR, 1879.	MONTHS, 1879.												NATIVITY OF MOTHERS OF ILLEGITIMATE CHILDREN, 1879.						NATIVITY OF FATHERS OF ILLEGITIMATE CHILDREN, 1879.																	
		January.						February.						March.						April.						May.											
		19						20						26						25						31											
		19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18					
Total.....	* 292	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18					
Males...	152	12	13	14	15	16	17	18	19	20	21	22	23	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18					
Females.	139	7	7	7	7	7	7	7	7	7	7	7	7	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Unknown	1																																				
		Total.						Total.						Total.						Total.						Total.						Total.					
		Born in Mich-igan.						Born in Mich-igan.						Born in Mich-igan.						Born in Mich-igan.						Born in Mich-igan.						Born in Mich-igan.					
		Born in Other States.						Born in Other States.						Born in Other States.						Born in Other States.						Born in Other States.						Born in Other States.					
		Born in Can-ada.						Born in Can-ada.						Born in Can-ada.						Born in Can-ada.						Born in Can-ada.						Born in Can-ada.					
		Born in Other Countries.						Born in Other Countries.						Born in Other Countries.						Born in Other Countries.						Born in Other Countries.						Born in Other Countries.					
		Unknown.						Unknown.						Unknown.						Unknown.						Unknown.						Unknown.					

* 7 males, 3 females, 1 unknown sex, still-born; 1 pair male twins, 1 pair female twins, and 1 pair twins one of each sex; 5 males, 2 females Black; 4 females Mulatto; 3 males, 4 females Indian, 1 female half Indian; 1 male, 2 females White and Indian; and 1 male unknown color.

TABLE XX.—*Exhibiting the Number of Males to 100 Females among Twin Children, and the Number of Illegitimate and Still-born Children Returned as having been born in Michigan during the Year 1879.*

STATE AND COUNTIES.	Twin Chil- dren,— Number of Males to 100 Females.	Number of Illegiti- mate Chil- dren born in 1879.	Number of Still- births in 1879.	COUNTIES.	Twin Chil- dren,— Number of Males to 100 Females.	Number of Illegiti- mate Chil- dren born in 1879.	Number of Still- births in 1879.
State.....	94	292	749	Keweenaw.....			5
Alcona.....		1	3	Lake.....	b		1
Allegan.....	122	3	13	Lapeer.....	33	4	9
Alpens.....	100		2	Leelanaw.....	100	5	6
Antrim.....	a		1	Lenawee.....	200	8	11
Baraga.....		1	2	Livingston.....	100	1	6
Barry.....	100	5	11	Macomb.....	20	2	19
Bay.....	83	6	15	Manistee.....	167	1	14
Benzie.....	b	1	2	Marquette.....	60	4	23
Berrien.....	60	2	14	Mason.....	60		4
Branch.....	133	2	22	Mecosta.....	20	1	1
Calhoun.....	157	3	10	Menominee.....	300		3
Cass.....	67	8	5	Midland.....	100	1	5
Charlevoix.....	100		3	Monroe.....	250		28
Cheboygan.....	a	1	4	Montcalm.....	100	5	6
Chippewa.....	b	4	3	Muskegon.....	233	1	6
Clinton.....	100	5	9	Newaygo.....	20	2	
Crawford.....			2	Oakland.....	167	5	13
Delta.....	100	1	3	Oceana.....	100	1	
Eaton.....	150	7	17	Ontonagon.....	a		2
Emmet.....	b	5	2	Osceola.....	300	1	7
Genesee.....	186	4	12	Ottawa.....	63	4	28
Grand Traverse..	100	2	5	Presque Isle.....	b		
Gratiot.....	122	3	3	Saginaw.....	110	3	37
Hillsdale.....	233		13	Sanilac.....	100	10	8
Houghton.....	23	2	31	Schoolcraft.....		1	
Huron.....	a		8	Shiawassee.....	50		10
Ingham.....	100	1	16	St. Clair.....	65	4	17
Ionia.....	50	2	8	St. Joseph.....	200	6	11
Ioseo.....	33	1	2	Tuscola.....	173	1	18
Isabella.....	100		6	Van Buren.....	60	5	14
Jackson.....	100	1	7	Washtenaw.....	50	1	13
Kalamazoo.....	100	5	18	Wayne.....	78	128	114
Kalkaska.....	50	1		Wexford.....	300	5	11
Kent.....	100	5	27				

a No males.

b No females.

The names of the townships of Michigan in which it is reported that no births occurred in 1879 are shown in Exhibit 10. There are 20 such townships, eleven of which represent a population, according to the Census of 1874, of 944, the other nine having been organized since the Census was taken.

EXHIBIT 10.—*Townships in which it is Reported that there were No Births in 1879.*

COUNTIES.	TOWNSHIPS,—No Births in 1879.	POPULATION IN 1874.		
		Total.	Males.	Females.
Total.....		944	580	364
Alpena.....	Ossineke.....	110	78	32
Benzie.....	Lake.....	40	23	18
Clare.....	Frost.....			
	Hayes.....			
	Summerfield.....	184	73	61
Crawford.....	South Branch.....			
Delta.....	Nahma.....	164	87	77
Emmet.....	Carp Lake.....			
Iosco.....	Grant.....	51	31	20
Kalkaska.....	Cold Springs.....	51	26	25
Lake.....	Elk.....	91	68	23
	Glencoe.....			
	Webber.....	114	63	51
Manistee.....	Springdale.....	49	28	21
Missaukee.....	West Branch.....	64	52	12
Ontonagon.....	Carp Lake.....	76	52	24
Roscommon.....	Gerrish.....			
	Nester.....			
	Roscommon.....			
Saginaw.....	Marion.....			

* Organized since Census was taken.

Table XXI. is published as showing the names of the townships in Michigan from which the State Department has not received any returns of births for 1879. There are twenty-four such townships, and in the case of eight of these, the county clerk informs this office that the supervisor has neglected to make returns to him. The townships from which no returns have been received by the State Department, exclusive of those which have been organized since the Census of 1874 was taken (six in number), represent a population of 11,597 in 1874. Estimating the number of births for these 11,597 people, at the proportion shown for the rest of the State, it is shown that these delinquent town-

ships probably added about 300 children to the population of the State in 1879, and therefore the showing of our tables of total births is too small by that number. There is no reason in necessity why we should not receive returns from every township.

TABLE XXI.—*Exhibiting the Counties and Townships from which no Returns of Births in 1879 were received, and the Number of Inhabitants, in 1879, in such Counties and Townships.*

COUNTIES.	TOWNSHIPS FROM WHICH NO RETURNS OF BIRTHS WERE RECEIVED FOR 1879.	POPULATION IN 1874.		
		Total.	Males.	Females.
Total.....		11,597	6,362	5,235
Cass.....	Ontwa.....	929	464	465
Chippewa.....	Detour..... ^a	221	131	90
Delta.....	Baldwin..... ^a	261	169	92
	Maple Ridge..... ^a	182	103	79
Emmet.....	Maple River..... ^{ab}			
Iosco.....	Sherman..... ^b			
	Thompson.....	56	35	21
	Wilber..... ^b			
Keweenaw.....	Eagle Harbor.....	1,092	651	441
	Sherman.....	928	532	396
Mackinac.....	Holmes.....	798	406	392
	St. Ignace.....	326	166	160
Montcalm.....	Pine..... ^a	461	255	206
Muskegon.....	Montague..... ^a	1,360	746	614
	Moorland.....	213	110	97
	Norton..... ^a	392	241	151
Otsego..... ^b	Dover..... ^b			
Presque Isle.....	Bismarck..... ^b			
Schoolcraft.....	Manistique.....	301	195	106
	Munising.....	472	320	152
	Onota.....	517	309	208
Washtenaw.....	Salem.....	1,202	628	574
	Sylvan.....	1,886	895	991
Wexford.....	Concord..... ^{bc}			

^a County clerk says no returns from Supervisor.

^b Organized since Census was taken.

^c County clerk forbidden to recognize any supervisor.

SEX OF CHILDREN.

The influences of the seasons of the year, of parent-nativity, of deaths, etc., upon the sex of children born in Michigan may be studied in the following tables and exhibits.

TABLE XXII.—*Exhibiting, by Months, the Relation between the Total Number of Conceptions during certain Months of the Years 1878-9, and the Proportion of each Sex Conceived during the same time and Born during the Year ending December 31, 1879, according to the Returns.*

CONCEPTIONS FOR BIRTHS IN 1879. ^a				
Months of 1878 and 1879 of Conceptions of Births in 1879, in order by number, the least first.	Total Number of Conceptions. ^b	Months ^a of 1878 and 1879, in order by number of Males to 100 Females, greatest first.	Number of Males to 100 Females.	
Less than the Average Number of Conceptions.		More than the Average Proportion of Males.		
April.....	2,380	December..... ^c	116	
May.....	2,531	August.....	114	
September.....	2,661	January, 1879..... ^c	112	
June.....	2,707	March, 1879..... ^c	111	
July.....	2,743	February, 1879..... ^c	110	
August.....	2,787	Average.....	109	
Average.....	2,837			
More than the Average Number of Conceptions.		Less than the Average Proportion of Males.		
February, 1879.....	2,802	November.....	109	
October.....	2,959	July..... ^c	108	
January, 1879.....	2,977	April..... ^c	106	
November.....	3,136	May..... ^c	105	
March, 1879.....	3,171	June..... ^c	105	
December.....	3,192	October.....	105	
		September..... ^c	103	

^a Equalized to months of 30.44 days each, and excluding unknown sex and unknown month.

^b For purposes of this study the time of conception is presumed to be nine calendar months previous to the month of birth.

^c Exceptions to the proposition that *more* than the average proportion of males were conceived in months in which *less* than the average number of conceptions occurred, and *vice versa*.

EXHIBIT N.—*Births Returned as having occurred in Michigan during the Year 1879, by Sex, and by Months Equalized to 30.44 days each.*

SEX.	YEAR, 1879.	MONTHS OF BIRTHS, EQUALIZED, 1879.												
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Total.....	34,120	2,385	2,534	2,709	2,746	2,791	2,665	2,964	3,140	3,195	2,981	2,806	3,174	30
Males.....	17,755	1,227	1,299	1,384	1,427	1,462	1,351	1,518	1,634	1,711	1,572	1,469	1,670	11
Females..	16,317	1,153	1,232	1,323	1,316	1,305	1,310	1,441	1,502	1,481	1,405	1,333	1,501	15
Unknown.	48	5	3	2	3	4	4	5	4	3	4	4	3	4

^a The number of births of males and the total number, as equalized, do not equal the number of births as returned because of the loss of fractions, and the unequal numbers in the several months modified by addition and subtraction. The total number as equalized is 2 less than the total number returned (34,122).

TABLE XXIII.—*Exhibiting, by Months, the Relation between the Number of Conceptions and the Number of Males to 100 Females. Conceptions estimated from Births Corrected as if Enumerated in Months of Occurrence and Equalized to Months of uniform length.*

CONCEPTIONS FOR BIRTHS, 1879. ^a					
Months of 1878 and 1879 of Conceptions of Births in 1879, estimated from Births Corrected as if enumerated in months of occurrence, and equalized to months of uniform length. Months arranged in order by number, the least first.		Number of Conceptions as Corrected and Equalized. ^b	Months of 1878 and 1879 of Conceptions of Births in 1879, estimated from Births Corrected as if enumerated in months of occurrence, and equalized to months of uniform length. Months arranged in order by number of Males to 100 Females, greatest first.		Number of Males to 100 Females. Births Corrected and Equalized.
Less than the Average No. of Conceptions.	February, 1879.....	3,575	More than the Average Proportion of Males.	August..... ^c	122
	March, 1879.....	3,902		December..... ^c	122
	January, 1879.....	3,936		July..... ^c	117
	September.....	4,002		January, 1879.....	117
	April.....	4,128		April.....	116
Average.....		4,174	Average.....		116
More than the Average No. of Conceptions.	May.....	4,273	Less than the Average Proportion of Males.	November.....	115
	October.....	4,316		February, 1879..... ^c	115
	August.....	4,326		March, 1879..... ^c	115
	December.....	4,369		May.....	114
	July.....	4,380		June.....	113
	November.....	4,433		October.....	112
	June.....	4,445		September..... ^c	110

^a See foot-note ^b to Table XXII., page 64.

^b Excluding unknown month and unknown sex.

^c Exceptions to the proposition that *more* than the average proportion of males were conceived in months in which *less* than the average number of conceptions occurred, and *vice versa*.

EXHIBIT O.—*Births Returned as having occurred in Michigan during the Year 1879, by Sex, and by Months Equalized to 30.44 days each, and by Months, the Excess of Males over Females, and the Number of Males to 100 Females. Unknown Sex and unknown month excluded.*

SEX.	YEAR, 1879.	MONTHS OF BIRTHS, EQUALIZED, 1879.											
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Both Sexes.....	^a 34,046	2,380	2,531	2,707	2,743	2,787	2,661	2,959	3,136	3,192	2,977	2,802	3,171
Males.....	17,744	1,227	1,299	1,384	1,427	1,482	1,351	1,518	1,634	1,711	1,572	1,469	1,670
Females.....	16,302	1,153	1,232	1,323	1,316	1,305	1,310	1,441	1,502	1,481	1,405	1,333	1,501
Excess of Males	1,442	74	67	61	111	177	41	77	132	230	167	136	169
Males to 100 Females.....	109	106	105	105	108	114	103	105	109	116	112	110	111

^a Excluding 74 births of unknown sex and in unknown month, and 2 lost in equalizing.

9—1879.

TABLE XXIV.—*Exhibiting by Months, according to the Returns, the Relation between the Total Number of Conceptions, and the Total Number of Deaths which occurred in the Months of the Years 1878 and 1879 in which were Conceived the Children Born during the Year ending December 31, 1879.*

DEATHS.		CONCEPTIONS, ^b	
Months ^a of 1878 and 1879 of Conceptions of Births in 1879, arranged in order by Total Number of Deaths, the least first.	Number of Deaths, as Equalized.	Months ^a of 1878 and 1879 of Conceptions of Births in 1879, in order by number, the least first.	Number of Conceptions, as Equalized. ^a
Less than the Av. No. of Deaths.	January, 1879.....	April.....	2,385
	February, 1879.....	May.....	2,534
	March, 1879.....	September.....	2,665
	June.....	June.....	2,709
	Average.....	July.....	2,746
More than the Av. No. of Deaths.	May.....	August.....	2,791
	July.....	February, 1879.....	2,806
	April.....	Average.....	2,841
	October.....	October.....	2,964
	November.....	January, 1879.....	2,981
	September.....	November.....	3,140
	December.....	March, 1879.....	3,174
	August.....	December.....	3,195

^a Equalized to months of 30.44 days each, excluding unknown month.

^b See foot-note ^b to table XXII., page 64.

EXHIBIT P.—*Births Returned as having occurred in Michigan during the Year 1879, by Sex and by Months, Corrected for Omissions in Enumerating, Equalized for Increase of Population during the Year covered by the Returns, and as thus corrected and Equalized for the several Months, Equalized for Months of 30.44 days each.*

SEX.	YEAR, 1879.	MONTHS OF BIRTH, 1879.											
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Both Sexes...	51,923	4,302	4,433	4,600	4,518	4,428	4,100	4,407	4,512	4,429	3,977	3,600	3,914
Males.....	27,465	2,309	2,367	2,440	2,433	2,422	2,149	2,329	2,416	2,432	2,147	1,925	2,096
Females.....	23,760	1,993	2,071	2,160	2,085	2,006	1,951	2,078	2,096	1,997	1,830	1,675	1,818

TABLE XXV.—*Exhibiting the Relation, by Months, between the Number of Conceptions and the Number of Deaths, the Number of Deaths and Births Returned from which Conceptions are estimated, being Corrected as if Enumerated in Months of Occurrence, and Equalized to Months of uniform length.*

DEATHS.		CONCEPTIONS. ^a	
Months of 1878 and 1879 of Conceptions of Births in 1879, arranged in order by number of Deaths, the least first. Deaths Corrected as if enumerated in months of occurrence, and equalized to months of uniform length.	Number of Deaths, as Corrected and Equalized.	Months of 1878 and 1879 of Conceptions of Births in 1879, estimated from Births Corrected as if enumerated in months of occurrence, and equalized to months of uniform length. Months arranged in order by number, the least first.	Number of Conceptions, as Corrected and Equalized. ^b
Less than the Average Number of Deaths.		Less than the Av. No. of Conceptions.	
June.....	1,353	February, 1879.....	3,580
May.....	1,433	March, 1879.....	3,903
July.....	1,482	January, 1879.....	3,939
January, 1879.....	1,495	September.....	4,010
November.....	1,546	April.....	4,137
October.....	1,564	Average.....	4,178
Average.....	1,632	More than the Average Number of Conceptions.	
More than the Av. No. of Deaths.		May.....	4,279
December.....	1,669	October.....	4,323
April.....	1,701	August.....	4,327
March, 1879.....	1,750	December.....	4,368
February, 1879.....	1,771	July.....	4,384
September.....	1,890	November.....	4,437
August.....	1,932	June.....	4,448

^a See foot-note ^b to Table XXII., page 64.

^b Excluding unknown month.

TABLE XXVI.—*Exhibiting by Months, the Relation between the Number of Deaths and the Proportion of each Sex Conceived during the same Months of the Years 1878 and 1879; the Number of Deaths and the Number of Births Returned from which Conceptions are estimated being Corrected as if Enumerated in Months of Occurrence, and Equalized to Months of uniform length.*

DEATHS.		CONCEPTIONS. ^a	
Months of 1878 and 1879 of Conceptions of Births in 1879, arranged in order by number of Deaths, least first. Deaths Corrected as if enumerated in months of occurrence, and equalized to months of uniform length.	Number of Deaths, as Corrected and Equalized.	Months of 1878 and 1879 of Conceptions of Births in 1879, estimated from Births Corrected as if enumerated in months of occurrence, and equalized to months of uniform length. Months arranged in order by number of Males to 100 Females, greatest first.	Number of Males to 100 Females. Births Corrected and Equalized. ^b
Less than the Average Number of Deaths.		More than the Average Proportion of Males.	
June.....	1,853	August.....	122
May.....	1,433	December.....	123
July.....	1,482	July.....	117
January, 1879.....	1,495	January, 1879.....	117
November.....	1,546	April.....	116
October.....	1,564	Average.....	116
Average.....	1,632		
More than the Av. No. of Deaths.		Less than the Average Proportion of Males.	
December.....	1,669	November.....	115
April.....	1,701	February, 1879.....	115
March, 1879.....	1,750	March, 1879.....	115
February, 1879.....	1,771	May.....	114
September.....	1,890	June.....	113
August.....	1,932	October.....	113
		September.....	110

^a See foot-note ^b to Table XXII., page 64.

^b Excluding births in unknown month and of unknown sex.

TABLE XXVII.—*Exhibiting by Months, according to the Returns, the Relation between the Total Number of Deaths and the Proportion of each Sex Conceived during the same Months of the Years 1878 and 1879, and Born during the Year ending December 31, 1879.*

DEATHS.		CONCEPTIONS. ^b	
Months of 1878 and 1879 of Conceptions of Births in 1879, arranged in order by Number of Deaths, the least first.	Number of Deaths, as Equalized.	Months ^a of 1878 and 1879, in order by number of Males to 100 Females, greatest first.	Number of Males to 100 Females.
Less than the Av. No. of Deaths.		More than the Av. Proportion of Males.	
January, 1879.....	717	December.....	116
February, 1879.....	853	August.....	114
March, 1879.....	914	January, 1879.....	112
June.....	915	March, 1879.....	111
Average.....	1,150	February, 1879.....	110
		Average.....	109
More than the Average Number of Deaths.		Less than the Av. Proportion of Males.	
May.....	1,063	November.....	109
July.....	1,162	July.....	108
April.....	1,191	April.....	106
October.....	1,263	May.....	105
November.....	1,287	June.....	105
September.....	1,424	October.....	105
December.....	1,493	September.....	103
August.....	1,509		

^a Equalized to months of 30.44 days each, excluding unknown sex and unknown month.

^b See foot-note ^b to Table XXII., page 64.

TABLE XXVIII.—*Exhibiting for the Total Births, for the Twins, Illegiti-
mates, and Still-born Children Returned as having been Born in Michigan
during the Year 1879; the Number of Boys to 100 Girls among such Children,
distinguishing by Parent-Nativities, thus exhibiting the Influence of Parent-
Nativity and of other Conditions upon Sex of Children.*

NATIVITY OF PARENTS.	BIRTHS, 1879. ^a		BOYS TO 100 GIRLS.			
	Males.	Females.	Total Births.	Twin Children.	Illegiti- mates.	Still- births.
All Nativities.....	17,757	16,317	108.83	94.20	109.35	141.95
Both Parents Native.....	8,225	7,618	107.97	117.44	-----	121.17
Both Parents Foreign.....	5,939	5,415	109.68	70.37	-----	170.00
Foreign Father and Native Mother..	2,023	1,931	104.76	100.00	-----	163.15
Foreign Mother and Native Father..	1,068	950	114.53	61.90	-----	121.43
One or Both Unknown.....	482	403	119.60	140.00	-----	156.67
Mothers.. { Native.....	10,356	9,645	107.37	112.93	104.48	126.06
Mothers.. { Foreign.....	7,068	6,408	110.80	67.60	87.50	166.71
Mothers.. { Unknown.....	333	264	126.14	233.33	168.67	146.43
Fathers.. { Native.....	9,392	8,631	108.82	134.58	81.25	121.43
Fathers.. { Foreign.....	7,998	7,392	108.34	79.49	118.18	166.96
Fathers.. { Unknown.....	367	304	120.72	140.00	112.50	150.00
One or Both Native.....	11,523	10,658	108.12	105.11	-----	125.42
One or Both Foreign.....	9,127	8,375	108.98	75.73	-----	163.91
Both Unknown.....	218	165	132.12	233.33	-----	137.50
Same Country.....	^b 14,164	^b 13,033	^b 108.68	^c 97.95	-----	^c 143.52
Different Countries.....	^d 3,111	^d 2,881	^d 107.93	^e 82.76	-----	^e 126.92
Same American State or Foreign Country.....	-----	-----	-----	84.19	-----	167.55
Different American States or Foreign Countries.....	-----	-----	-----	61.70	-----	86.84

^a Excluding unknown sex.

^b Includes "Native" and "Foreign."

^c Includes "Native," and same Foreign Country.

^d Includes "Foreign Father and Native Mother," and "Foreign Mother and Native Father."

^e Includes "Different Countries," "Foreign Father and Native Mother," and "Foreign Mother and Native Father."

MARRIAGES, 1879.

The whole number reported for 1879 is 13,225, which is an increase of 1,004 over the number returned for the previous year. This is the largest number returned to the State Department for any year, and seems to reflect the degree of business prosperity and activity throughout the State, and also the return of prosperous times from the financial depression which began in 1873.

If the ministers and justices who solemnize marriages would obey the law, and make a record and return promptly of all marriages solemnized by them, it would not be necessary for us to make corrections from year to year as it is at the present time. This is a result of carelessness on their part, and is greatly to be regretted, as it would be far more satisfactory in making the tables and exhibits to know that the entire number was returned. No one is excusable for violating or ignoring an existing law.

The average number of marriages for each of certain specified periods of time during the year 1879, may be seen as follows:

Number of marriages.....	13,225.00
Average number per quarter.....	3,306.25
Average number per month.....	1,102.08
Average number per week.....	254.33
Average number per day.....	36.23

The number and per cent. of marriages, by quarters of the year, returned previous to January 15, 1881, for each of the years 1874-1879 may be seen in Table I. The largest number of marriages in Michigan always occurs in the quarter of the year ending with December. For the year 1879 the next largest number of marriages appears for the quarter ending with September. In this table the marriages are corrected for additional returns.

Exhibit A is similar to Table I. and shows, by quarters of the year, the number of marriages as originally returned and compiled for each of the years 1874-1879; while Table I. exhibits the number in the different quarters of these same years after the additional returns have been added. By comparing the table with the exhibit it will be seen, as has been already mentioned, that the law is frequently violated by those persons who are authorized to solemnize marriages, by sending their returns of marriages a year or more after they have taken place.

TABLE I.—*Marriages by Quarters of the Year, showing Number and Per Cent. in each Quarter of the Year for each of the Years 1874, 1875, 1876, 1877, 1878, and 1879, Corrected for Additional Returns, up to January 15, 1881.*

TOTALS, AND MONTHS WITH WHICH QUARTERS END.	1874.		1875.		1876.		1877.		1878.		1879.	
	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.
Totals.....	12,255	100.00	11,818	100.00	11,846	100.00	11,789	100.00	12,635	100.00	13,225	100.00
March.....	2,945	24.03	2,590	21.91	2,704	23.83	2,697	22.88	2,953	23.30	3,039	22.98
June.....	2,597	21.19	2,654	22.46	2,626	22.17	2,542	21.56	2,655	20.91	2,806	21.22
September.....	2,934	23.94	2,774	23.47	2,853	24.08	2,813	23.86	2,982	23.49	3,133	23.69
December.....	3,768	30.75	3,798	32.14	3,657	30.87	3,726	31.61	4,090	32.22	4,243	32.08
Unknown.....	11	.09	2	.02	6	.05	11	.09	10	.08	4	.03
Average *.....	3,064	25.00	2,955	25.00	2,962	25.00	2,947	25.00	3,174	25.00	3,306	25.00

* Including unknown quarter.

EXHIBIT A.—*Marriages by Quarters of the Year, showing number and Per Cent. in each Quarter of the Year, for each of the Years 1874, 1875, 1876, 1877, 1878, and 1879, as Originally Returned and published in Reports.*

TOTALS, AND MONTHS WITH WHICH QUARTERS END.	1874.		1875.		1876.		1877.		1878.		1879.	
	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.	Num- ber.	Per Cent.
Totals.....	11,041	100.00	11,055	100.00	10,858	100.00	11,009	100.00	12,221	100.00	13,225	100.00
March.....	2,832	25.65	2,519	22.79	2,599	23.94	2,633	23.92	2,901	23.74	3,039	22.98
June.....	2,483	22.49	2,557	23.13	2,474	22.79	2,422	22.00	2,606	21.32	2,806	21.22
September.....	2,713	24.57	2,625	23.74	2,677	24.65	2,646	24.03	2,906	23.78	3,133	23.69
December.....	3,003	27.20	3,353	30.33	3,105	28.60	3,298	29.96	3,798	31.08	4,243	32.08
Unknown.....	10	.09	1	.01	3	.03	10	.09	10	.08	4	.03
Averages.....	2,760	25.00	2,764	25.00	2,715	25.00	2,752	25.00	3,055	25.00	3,306	25.00

* Including unknown quarter.

The number and per cent. of marriages in the different months of the years 1876-1879, may be seen in Table II. For the year 1879 the month of October has the largest number of marriages and the month of June the smallest. Only four out of the twelve months of 1879 have more than the average per

cent. of marriages, those months being October, November, December, and September, the greatest first in the order named. In looking over the table it is seen that autumn is the season of the year when the marriages are most numerous.

TABLE II.—*Marriages Returned as having been solemnized in Michigan, by Months, Arranged in Order by Number, Months having the greatest number first, for the Years 1876, 1877, 1878, and 1879, Corrected, for additional returns, up to January 15, 1881.*

ORDER.	1876.			1877.			1878.			1879.		
	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.	MONTHS.	Num-ber.	Per Ct. of Total.
	Total....	11,846	100.00	Total....	11,789	100.00	Total....	12,695	100.00	Total....	13,225	100.00
1	Dec.....	1,250	10.55	Dec.....	1,274	10.81	Oct.....	1,389	10.94	Oct.....	1,467	11.09
2	Oct.....	1,242	10.49	Oct.....	1,235	10.47	Dec.....	1,379	10.86	Nov.....	1,440	10.89
3	Nov.....	1,165	9.83	Nov.....	1,217	10.32	Nov.....	1,322	10.41	Dec.....	1,336	10.10
4	July.....	1,050	8.86	Sept.....	1,097	9.31	Sept.....	1,162	9.15	Sept.....	1,219	9.22
5	Sept.....	1,015	8.57	Jan.....	971	8.24	Jan.....	1,081	8.52	Jan.....	1,063	8.04
6	April.....	958	8.09	April.....	941	7.98	Mar.....	1,003	7.90	July.....	1,027	7.76
7	Jan.....	955	8.06	July.....	938	7.94	May.....	944	7.44	Mar.....	1,006	7.61
8	Feb.....	879	7.42	Mar.....	877	7.44	April.....	939	7.40	May.....	994	7.52
9	Mar.....	870	7.35	May.....	862	7.31	July.....	926	7.29	Feb.....	970	7.33
10	May.....	868	7.33	Feb.....	849	7.20	Aug.....	894	7.04	Apr.....	966	7.30
11	June.....	800	6.75	Aug.....	780	6.62	Feb.....	874	6.89	Aug.....	887	6.71
12	Aug.....	788	6.65	June.....	739	6.27	June.....	772	6.08	June.....	846	6.40
	Unk.....	6	.05	Unk.....	11	.09	Unk.....	10	.08	Unk.....	4	.03
	Aver'ge ^a	987	8.33	Aver'ge ^a	982	8.33	Aver'ge ^a	1,058	8.33	Aver'ge ^a	1,102	8.33

^a Includes those for unknown month.

Exhibit B presents the number of marriages as returned and as equalized to months of uniform length for each of the years 1875-1879. As stated in previous reports, the number of marriages as returned, and as given in this exhibit for the present year, do not agree with the numbers published in the preceding volume, because of the additional returns which have been added to some if not all of the years.

Diagram No. 2 also presents to the eye the increase or decrease in the number of marriages for the different months for each of the years 1877-1879. The rise in the line indicates an increase in the number of marriages, while the fall in the line denotes the decrease. The greatest rise in the lines appears for the Autumn months and the greatest fall in the months of June and August.

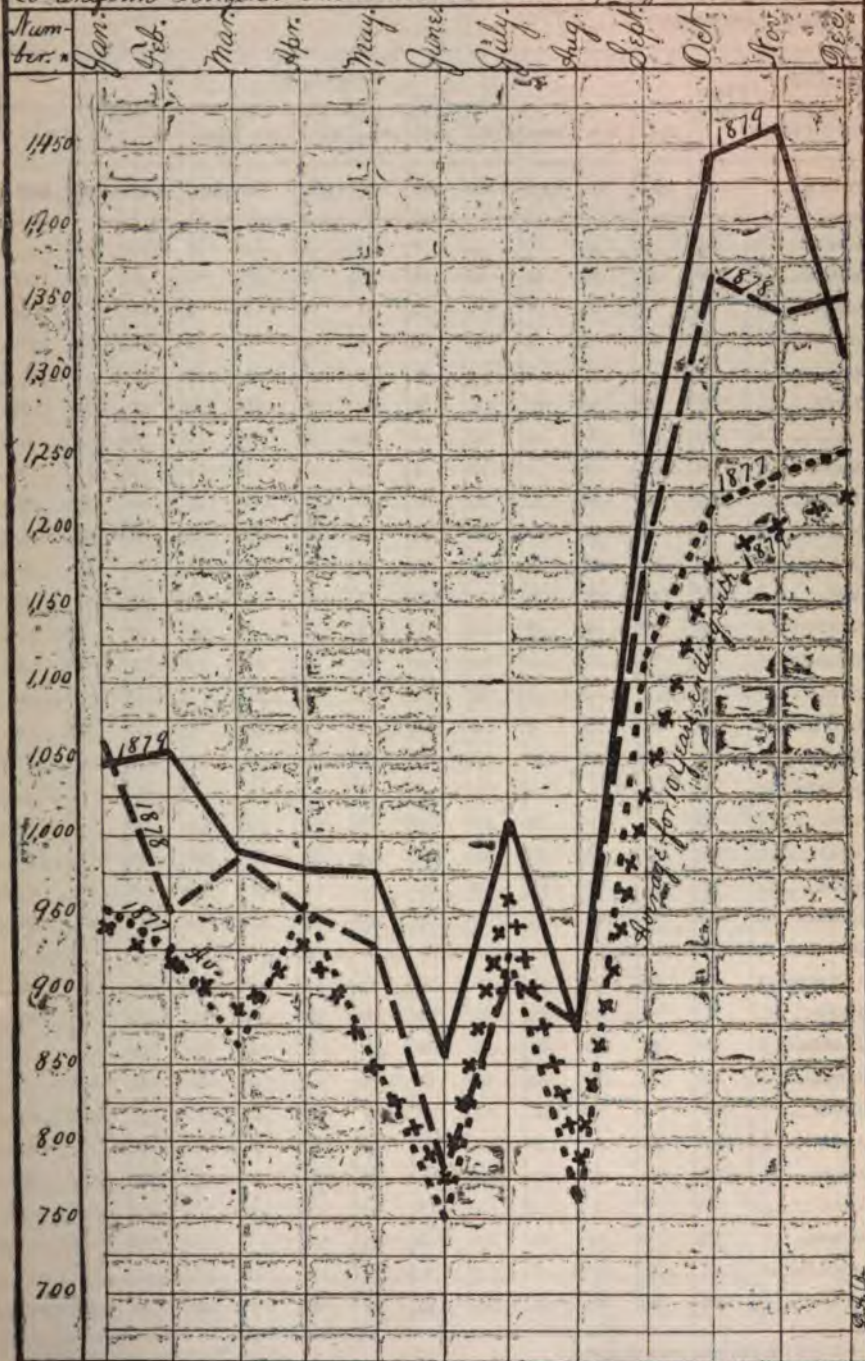
VITAL STATISTICS OF MICHIGAN, 1879.

EXHIBIT B.—Marriages in Michigan during the Years 1875 to 1879, inclusive, Corrected, for additional returns, up to January 15, 1881, and Equalized to Months of 30.44 days each.

YEAR.	TOTAL.	MONTHS.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Marriages as returned..... Days and hundredths by which the months should be in- creased or diminished to equalize them to uniform length..... Number by which the marriages should be increased or di- minished to equalize them to months of uniform length.....	11,818	867	807	916	936	905	813	995	795	984	1,563	1,233	1,392	2
	-----	-56	+2.44	-56	+44	-56	+44	-56	-56	+44	-56	+44	-56	-----
	-----	-16	+70	-17	+14	-16	+12	-18	-14	+14	-23	+18	-24	-----
Marriages, equalized to months of uniform length.....	11,818	851	877	899	950	889	825	977	781	998	1,240	1,251	1,278	2
Marriages as returned..... Days and hundredths by which the months should be in- creased or diminished to equalize them to uniform length..... Number by which the marriages should be increased or di- minished to equalize them to months of uniform length.....	11,846	953	879	870	938	868	800	1,050	788	1,015	1,242	1,165	1,250	6
	-----	-56	+1.44	-56	+44	-56	+44	-56	-56	+44	-56	+44	-56	-----
	-25	-17	+44	-16	+14	-16	+12	-19	-14	+15	-22	+17	-23	-----
Marriages, equalized to months of uniform length.....	11,821	938	923	854	972	852	812	1,031	774	1,030	1,220	1,182	1,227	6
Marriages as returned..... Days and hundredths by which the months should be in- creased or diminished to equalize them to uniform length..... Number by which the marriages should be increased or di- minished to equalize them to months of uniform length.....	11,739	971	849	877	941	862	739	936	780	1,097	1,235	1,217	1,274	11
	-----	-56	+2.44	-56	+44	-56	+44	-56	-56	+44	-56	+44	-56	-----
	+7	-18	+74	-16	+14	-16	+11	-17	-14	+16	-22	+18	-23	-----
Marriages, equalized to months of uniform length.....	11,796	953	923	861	955	846	750	919	766	1,113	1,213	1,235	1,251	11
Marriages as returned..... Days and hundredths by which the months should be in- creased or diminished to equalize them to uniform length..... Number by which the marriages should be increased or di- minished to equalize them to months of uniform length.....	12,695	1,081	874	1,003	939	944	772	926	894	1,162	1,389	1,322	1,379	10
	-----	-56	+2.44	-56	+44	-56	+44	-56	-56	+44	-56	+44	-56	-----
	-1	-20	+76	-18	+14	-17	+11	-17	-16	+17	-25	+19	-25	-----
Marriages, equalized to months of uniform length.....	12,694	1,061	950	985	933	927	783	909	878	1,179	1,364	1,341	1,354	10
Marriages as returned..... Days and hundredths by which the months should be in- creased or diminished to equalize them to uniform length..... Number by which the marriages should be increased or di- minished to equalize them to months of uniform length.....	13,225	1,063	970	1,006	966	994	846	1,027	887	1,219	1,467	1,440	1,336	4
	-----	-56	+2.44	-56	+44	-56	+44	-56	-56	+44	-56	+44	-56	-----
	+10	-19	+85	-18	+14	-18	+12	-19	-16	+18	-26	+21	-24	-----
Marriages, equalized to months of uniform length.....	13,235	1,044	1,055	968	980	976	838	1,008	871	1,237	1,441	1,461	1,312	4

Diagram No. 2.

Marriages in Michigan during the years 1877, 1878, and 1879, and Average for 10 Years, ending with 1879, by months equalized to uniform length. From Returns collected up to Jan. 15, 1881.



Scale = 125 to the inch.

Designed by Henry B. Baker.

TABLE III.—*Distinguishing, by Counties and by Months, the number of Marriages returned as having been solemnized in Michigan during the Year ending December 31, 1879.*

STATE AND COUNTIES.	Year, 1879.	MONTHS, 1879.											
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
STATE	13,225	1,063	970	1,006	966	994	848	1,027	887	1,219	1,467	1,440	1,326
Alcona.....	19	4	-----	1	-----	1	2	2	2	2	-----	5	-----
Allegan.....	315	33	17	22	16	23	27	19	31	22	33	33	39
Alpena.....	53	4	-----	1	3	3	7	3	4	5	6	7	10
Antrim.....	45	3	2	3	1	4	6	2	5	5	7	4	3
Baraga.....	9	-----	2	-----	1	-----	2	-----	-----	3	-----	1	-----
Barry.....	246	20	15	32	21	14	14	19	21	15	23	25	27
Bay.....	169	13	12	13	11	9	14	14	18	7	11	23	14
Benzie.....	31	-----	4	3	3	1	1	3	3	4	2	3	4
Berrien.....	486	36	30	37	38	27	30	34	39	55	64	51	44
Branch.....	311	23	22	36	18	14	12	27	21	18	44	36	40
Calhoun.....	330	35	25	29	17	16	14	16	25	32	40	47	34
Cass.....	232	21	23	23	15	20	20	15	13	14	20	23	19
Charlevoix..	34	2	4	3	5	3	4	2	-----	2	6	2	1
Cheboygan..	41	2	1	1	3	3	2	2	3	4	7	6	6
Chippewa...	19	-----	3	1	2	2	1	1	-----	1	4	2	2
Clare.....	27	4	2	3	3	3	-----	3	-----	1	-----	3	5
Clinton.....	229	18	21	14	13	22	6	18	15	25	27	16	34
Crawford...	2	-----	-----	-----	-----	-----	1	1	-----	-----	-----	-----	-----
Delta.....	60	3	1	3	4	3	3	9	8	6	6	7	7
Eaton.....	275	24	15	27	15	25	23	21	24	19	29	12	41
Emmet.....	38	5	3	3	3	1	1	4	-----	7	5	2	4
Genesee.....	366	34	48	22	16	16	29	33	22	41	41	34	30
Gladwin.....	3	-----	-----	1	-----	-----	-----	-----	-----	-----	-----	1	1
Gr. Traverse	77	5	6	8	15	4	2	5	4	5	7	11	5
Gratiot.....	177	7	16	9	17	9	12	14	14	25	18	19	17
Hillsdale...	330	28	35	35	32	26	16	28	20	28	52	43	37
Houghton...	170	16	17	10	11	22	10	6	14	17	21	17	9
Huron.....	138	5	8	14	9	12	6	11	15	12	17	20	9
Ingham.....	326	29	13	27	22	24	18	31	17	22	42	41	40
Ionia.....	339	28	27	34	26	16	13	26	29	30	53	30	27
Iosco.....	48	1	-----	3	4	6	2	6	6	1	6	10	3
Isabella.....	70	4	3	10	3	7	4	8	1	7	5	9	9
Isle Royal..*	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Jackson.....	390	31	24	31	29	33	22	31	19	34	43	55	38

* No returns from county clerk.

MARRIAGES BY COUNTIES, BY MONTHS.

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TABLE III.—CONTINUED.—*Marriages by Counties, by Months.*

COUNTIES.	Year, 1879.	MONTHS, 1879.												Unk.
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Kalamazoo..	250	30	25	14	20	21	12	14	14	23	33	18	26	----
Kalkaska....	16	1	-----	-----	1	-----	2	3	-----	2	3	3	1	----
Kent.....	632	53	42	50	53	43	48	48	42	62	69	63	59	----
Keweenaw....	7	1	-----	-----	2	1	1	-----	1	-----	-----	-----	1	----
Lake.....	24	4	1	1	-----	3	-----	2	1	2	1	4	5	----
Lapeer.....	253	27	21	25	24	10	9	23	24	25	23	26	21	----
Leelanaw....	33	3	4	2	4	-----	1	2	1	4	3	4	5	----
Lenawee....	425	33	31	40	39	21	35	24	20	36	39	45	62	----
Livingston..	146	17	9	15	14	8	4	11	9	15	16	11	17	----
Mackinac....	18	4	3	-----	1	-----	1	-----	1	3	3	-----	2	----
Macomb.....	229	24	21	21	26	18	14	15	7	12	25	24	22	----
Manistee....	85	5	4	5	7	8	3	11	6	7	14	9	3	----
Manitou....	5	2	1	-----	-----	-----	-----	1	-----	1	-----	-----	-----	----
Marquette..	120	13	9	7	7	14	5	10	6	21	14	6	8	----
Mason.....	86	4	2	5	10	5	8	6	4	11	13	8	10	----
Mecosta....	103	7	7	9	11	5	8	8	5	15	8	10	10	----
Menominee..	53	3	4	1	1	8	6	5	6	5	3	6	5	----
Midland....	43	4	4	5	2	5	1	3	2	3	4	7	3	----
Missaukee..	2	-----	-----	-----	-----	-----	2	-----	-----	-----	-----	-----	-----	----
Monroe.....	366	23	38	21	22	36	19	25	30	36	37	50	29	----
Montcalm...	244	16	13	16	18	22	12	30	22	25	20	21	29	----
Muskegon..	203	15	15	13	20	23	19	24	5	19	16	24	10	----
Newaygo....	103	8	8	13	12	6	7	12	7	5	8	7	10	----
Oakland....	304	25	28	32	21	22	23	18	8	24	33	32	38	----
Oceana.....	85	8	7	8	6	3	6	6	2	4	9	10	16	----
Ogemaw....*	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----
Ontonagon..	9	-----	-----	1	-----	-----	-----	3	-----	1	3	1	-----	----
Osceola....	94	7	6	8	8	9	6	6	3	11	5	10	15	----
Otsego.....	7	1	1	2	-----	-----	1	2	-----	-----	-----	-----	-----	----
Ottawa.....	244	22	16	19	26	19	22	14	15	18	23	27	23	----
Presque I'l..	4	-----	-----	-----	1	-----	-----	-----	1	-----	1	1	-----	----
Roscommon..	17	1	-----	2	3	-----	1	-----	1	1	2	3	3	----
Saginaw....	450	43	31	18	29	46	36	24	28	52	45	57	41	----
Sanilac....	147	4	14	8	17	9	10	10	9	20	21	13	12	----
Schoolcraft.	7	-----	-----	-----	-----	-----	-----	-----	2	2	2	1	-----	----
Shiawassee..	154	2	1	2	4	14	10	19	13	20	25	21	23	----
St. Clair....	384	26	24	23	25	36	28	34	26	31	49	33	49	----
St. Joseph..	277	15	25	18	17	24	12	12	25	31	35	36	27	----

* No returns from county clerk.

TABLE III.—CONTINUED.—*Marriages by Counties, by Months.*

COUNTIES.	Year, 1879.	MONTHS, 1879.												
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Tuscola.....	212	9	11	17	18	20	14	28	19	16	20	19	21	.....
Van Buren..	246	23	25	29	13	19	16	11	16	21	18	24	31	.....
Washtenaw..	319	22	27	21	27	25	18	27	14	28	39	40	31	.....
Wayne.....	1,308	113	90	73	77	119	98	114	86	133	140	161	103	1
Wexford.....	61	4	3	3	4	3	4	8	13	5	6	2	6	.....

COLOR OF PERSONS MARRIED.

The following table exhibits the color of persons married in 1879. Over 98 per cent. of the marriages were those of white persons, and a little over one per cent. were those of black and mulatto.

Table V. also shows, by counties, the color of persons married in 1879.

TABLE IV.—*Exhibiting, by Color and by Sex, the Number of Marriages, and the Number and Per Cent. of Total Number of Persons Married in Michigan during the Year 1879.*

COLOR,—1879.	SEX.	Number of Marriages, 1879.	PERSONS MARRIED, 1879.		Number of Per- sons who Married those of another Color.
			Number.	Per Cent. of Total.	
All Colors.....	Total.....	13,225	26,450	100.00	68
	Males.....	13,225	13,225	50.00	34
	Females.....	13,225	13,225	50.00	34
White.....	Total.....	12,987	25,986	98.25	18
	Males.....	12,987	12,989	49.14	9
	Females.....	12,987	12,987	49.10	9
Black.....	Total.....	121	223	.86	20
	Males.....	121	121	.46	17
	Females.....	107	107	.40	3
Mulatto.....	Total.....	34	78	.29	17
	Males.....	34	34	.13	3
	Females.....	44	44	.17	14
Indian.....	Total.....	37	77	.29	13
	Males.....	37	37	.14	5
	Females.....	40	40	.15	8
One or Both Unknown.....	Total.....	46	81	.31	-----
	Males.....	34	34	.13	-----
	Females.....	47	47	.18	-----
Black and Mulatto.....	Total.....	155	306	1.16	37
	Males.....	155	155	.59	20
	Females.....	151	151	.57	17

TABLE V.—*Exhibiting for the State and Counties, the Number of Marriages Returned as having been Solemnized in Michigan during the Year 1879, the Number of White Persons, and by Color the Number of Marriages where one or both parties were other than White.*

STATE AND COUNTIES.	Marriages, 1879.	COLOR OF PERSONS MARRIED, 1879, STATED BY COUPLES.						
		White.	Black.	Mulatto.	Indian.	FEMALE UNK.	MALE UNK.	Both
						Male White.	Female White.	Unknown.
State.....	13,225	a 12,987	b 121	c 34	d 37	12		34
Alcona.....	19	19						
Allegan.....	315	313	e 2					
Alpena.....	53	53						
Antrim.....	45	45						
Baraga.....	9	f 8			1			
Barry.....	246	244	g 1			1		
Bay.....	159	158	1					
Benzie.....	31	30				1		
Berrien.....	486	475	h 5	i 6				
Branch.....	311	310						1
Calhoun.....	339	309	j 4	3		3		11
Cass.....	232	219	k 7	6				
Charlevoix.....	34	33			1			
Cheboygan.....	41	41						
Chippewa.....	19	19						
Clare.....	27	27						
Clinton.....	229	228	1					
Crawford.....	2	2						
Delta.....	60	l 57			m 3			
Eaton.....	275	275						

a Includes 3 couples, male White, female "Half-breed;" 3 couples, male White, female White and Indian; 1 couple, male White, female Indian; 1 couple, male White, female White and Black; and 1 couple, male White, female Black.

b Includes 23 couples "Colored," 14 couples "African," 11 couples, male Black, female Mulatto; 2 couples, male Black, female White; 2 couples "Negro," 1 couple "White and African," 1 couple male Black, female Indian and Mulatto, 1 couple male "colored" female Mulatto, 1 couple male "African" female White, 1 couple male "African" female Mulatto, 1 couple "African" and Indian, and 1 couple "African and White."

c Includes 3 couples male "Brown" female Mulatto, 2 couples "Brown," 1 couple male "Light Brown" female Brunette, 1 couple male Mulatto female White, 1 couple male Mulatto female Black, 1 couple male Mulatto female "African," 1 couple male Mulatto female color Unknown, and 1 couple male "Dark" female Mulatto.

d Includes 9 couples White and Indian, 2 couples male Indian female White, 2 couples male White and Indian female White, 1 couple male White and Indian female Indian, and 1 couple male "Half-breed" female White.

e Includes 1 couple "African."

f Includes 1 couple male White female White and Indian.

g Includes 1 couple male Black female Mulatto. h Includes 1 couple "African," 2 couples "Colored," 1 couple male Black female Mulatto.

i Includes 1 couple male "Dark" female Mulatto, 1 couple male "Brown" female Mulatto, 1 couple male "Light Brown" female Brunette.

j Includes 3 couples "African."

k Includes 1 couple male Black female Mulatto, 1 couple "African and Indian," 1 couple male Black female "Indian and Mulatto."

l Includes 3 couples male White female "Half-breed," 1 couple male White female Indian.

m Includes 1 couple male "Half-breed," female White.

TABLE V.—CONTINUED.—*Marriages in 1879, by Counties, by Color.*

COUNTIES.	Marriages, 1879.	COLOR OF PERSONS MARRIED, 1879, STATED BY COUPLES.						
		White.	Black.	Mulatto.	Indian.	FEMALE UNK.	MALE UNK.	Both
						Male White.	Female White.	Unknown.
Emmet.....	38	^a 30	1		^b 7			
Genesee.....	366	361	^c 5					
Gladwin.....	3	3						
Grand Traverse.....	77	77						
Gratiot.....	177	176		^d 1				
Hillsdale.....	380	380						
Houghton.....	170	169	1					
Huron.....	138	138						
Ingham.....	326	323	^e 3					
Ionia.....	339	339						
Iosco.....	48	48						
Isabella.....	70	66			3	1		
Isle Royal.....								
Jackson.....	390	379	^g 9	^h 2				
Kalamazoo.....	250	248	ⁱ 2					
Kalkaska.....	16	16						
Kent.....	632	611	^j 6	^k 4		1		10
Keweenaw.....	7	7						
Lake.....	24	22			2			
Lapeer.....	258	258						
Leelanaw.....	33	30			3			
Lenawee.....	425	421	^l 3	^m 1				
Livingston.....	146	146						
Mackinac.....	18	ⁿ 10			^o 8			
Macomb.....	229	227	1	1				
Manistee.....	85	85						
Manitou.....	5	4			^p 1			
Marquette.....	120	120						
Mason.....	86	83		1	^p 2			•

^a Includes 1 couple, male White, female White and Black.

^b Includes 1 couple, male White and Indian, female White, 1 couple, male White and Indian, female Indian.

^c Includes 1 couple, male Black, female Mulatto.

^d Includes 1 couple, male Mulatto, female White.

^e Includes 2 couples "Colored."

^f No returns from county clerk.

^g Includes 1 couple, male Black, female Mulatto, and 2 couples "African."

^h Includes 1 couple, male Mulatto, female Black.

ⁱ Includes 1 couple "Colored."

^j Includes 1 couple, male Black, female Mulatto, and 1 couple male "Colored," female Mulatto.

^k Includes 2 couples "Brown," 2 couples, male "Brown," female Mulatto.

^l Includes 1 couple, male Black, female Mulatto, and 1 couple, male Black, female White.

^m Includes 1 couple, male Mulatto, female "African."

ⁿ Includes 2 couples, male White, female White and Indian.

^o Includes 7 couples White and Indian.

^p Includes 1 couple White and Indian.

TABLE V.—CONTINUED.—*Marriages in 1879, by Counties, by Color.*

COUNTIES.	Marriages, 1879.	COLOR OF PERSONS MARRIED, 1879, STATED BY COUPLES.						
		White.	Black.	Mulatto.	Indian.	FEMALE UNK.	MALE UNK.	Both Unknown.
						Male White.	Female White.	
Mecosta.....	106	100	a 2	-----	1	-----	-----	-----
Menominee.....	53	53	-----	-----	-----	-----	-----	-----
Midland.....	43	42	b 1	-----	-----	-----	-----	-----
Missaukee.....	2	2	-----	-----	-----	-----	-----	-----
Monroe.....	366	364	c 2	-----	-----	-----	-----	-----
Montcalm.....	244	234	d 3	-----	-----	4	-----	3
Muskegon.....	203	200	-----	-----	e 3	-----	-----	-----
Newaygo.....	103	102	f 1	-----	-----	-----	-----	-----
Oakland.....	304	300	g 4	-----	-----	-----	-----	-----
Oceana.....	85	85	-----	-----	-----	-----	-----	-----
Ogemaw..... ^h	-----	-----	-----	-----	-----	-----	-----	-----
Ontonagon.....	9	8	-----	-----	i 1	-----	-----	-----
Oscoda.....	94	94	-----	-----	-----	-----	-----	-----
Otsego.....	7	7	-----	-----	-----	-----	-----	-----
Ottawa.....	244	244	-----	-----	-----	-----	-----	-----
Presque Isle.....	4	4	-----	-----	-----	-----	-----	-----
Roscommon.....	17	17	-----	-----	-----	-----	-----	-----
Saginaw.....	450	440	j 8	2	-----	-----	-----	-----
Sanilac.....	147	147	-----	-----	-----	-----	-----	-----
Schoolcraft.....	7	6	-----	-----	1	-----	-----	-----
Shiawassee.....	154	154	-----	-----	-----	-----	-----	-----
St. Clair.....	384	382	2	-----	-----	-----	-----	-----
St. Joseph.....	277	276	1	-----	-----	-----	-----	-----
Tuscola.....	212	212	-----	-----	-----	-----	-----	-----
Van Buren.....	246	242	c 1	3	-----	-----	-----	-----
Washtenaw.....	319	306	k 11	2	-----	-----	-----	-----
Wayne.....	1,308	1,263	m 23	n 2	-----	1	-----	9
Wexford.....	61	61	-----	-----	-----	-----	-----	-----

a Includes 1 couple "African," and 1 couple "African and White."

b Includes 1 couple, male "African," female White.

c Includes 1 couple "Colored."

d Includes 1 couple "White and African," and 1 couple, male "African," female Mulatto.

e Includes 2 couples, male Indian, female White.

f Includes 1 couple, male Black, female White.

g Includes 1 couple, male Black, female Mulatto.

h No returns from county clerk.

i Includes 1 couple, male White and Indian, female White.

j Includes 2 couples "Negro," 1 couple, male Black, female Mulatto, and 1 couple "Colored."

k Includes 2 couples, male Black, female Mulatto.

l Includes 1 couple, male White, female Black.

m Includes 6 couples "African," and 20 couples "Colored."

n Includes 1 couple, male Mulatto, female color unknown.

Exhibit 1 shows the comparison between the percentages of marriages among the native-born and foreign-born in Michigan during the year 1879. It will be observed that 72.23 per cent. of the males, and 78.06 per cent. of the females married during the year were native-born; that 20.52 per cent. of the males, and 20.23 per cent. of the females were foreign-born.

In comparison with other years the showing is quite in keeping with the fact that the percentage of marriages among the native-born is increasing.

EXHIBIT 1.—*By Nativity, the Number and Per Cent. of Brides and of Bridegrooms Returned as having been married in Michigan during the Year ending December 31, 1879, and by number, the manner of their Union by Nativity.*

BRIDEGROOMS AND BRIDES, NATIVITY SPECIFIED.		BRIDES, 1879.			BRIDEGROOMS, 1879.	
		Native.	Foreign.	Un- known.	Total of each Na- tivity, and of all Na- tivities.	Per Cent. of each Na- tivity.
Bridegrooms ..	{ Native.....	8,484	979	59	9,532	72.23
	{ Foreign.....	1,793	1,690	24	3,507	20.52
	{ Unknown	47	6	113	166	1.25
Brides.....	{ Whole No. of each nativity and total..	10,324	2,675	226	13,225	-----
	{ Per cent. of each nativity and total..	78.06	20.23	1.71	-----	100.00

Table VI. also contains some interesting facts concerning the nativity of persons married in Michigan during the year 1879. Over 64 per cent. of all persons married were native-born.

TABLE VI.—*Exhibiting, by Sex, the Nativity of Persons returned as having been Married in Michigan during the Year 1879.*

NATIVITY.	MARRIAGES, 1879.		PERSONS MARRIED, 1879.		
	Number.	Per Cent. of Total.	Number.		
			Total.	Males.	Females.
Total.....	13,225	100.00	26,450	13,225	13,225
Native.....	8,484	64.15	19,876	9,552	10,324
Foreign.....	1,690	12.78	6,182	3,507	2,675
Foreign Male and Native Female.....	1,793	13.56			
Foreign Female and Native Male.....	979	7.40			
Unknown.....	* 279	2.11	392	166	226
One or Both Native.....	11,392	86.14			
One or Both Foreign.....	4,492	33.97			

* Includes cases where nativity of either person was unknown.

AGES OF PERSONS MARRIED.

The exhibit which follows is intended to show, by nativity, the average age of persons married in Michigan in each of the years 1876-1879. According to the showing here, there are only about five years difference between the average age of the males and that of the females in this State.

EXHIBIT C.—*Showing the Average Age of Persons Married in Michigan in 1876, 1877, 1878, and 1879, according to the Returns.*

NATIVITY OF PERSONS MARRIED.	1876.		1877.		1878.		1879.	
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
All nativities.....	28.19	23.05	28.25	23.06	28.01	22.91	28.01	23.00
Native.....	27.64	22.53	27.76	22.59	27.46	22.54	27.48	22.65
Foreign.....	29.54	24.82	29.53	24.63	29.51	24.28	29.42	24.28
Unknown.....	27.94	23.32	27.75	24.36	28.82	23.62	28.00	24.33

The next table gives the number of persons of both sexes and of each sex married during the year 1879 at each age and period of age; also the per cent. of the sexes at each age and period of age. It will be seen that the largest proportion both of males and females were married between the ages of 21 and 30 years; and that a number of marriages were solemnized during the year where one or both of the parties united were under the lawful age, which is 18 years for males and 16 years for females.

TABLE VII.—*By Sex, Age, and Periods of Age, the Number of Persons Returned as having been Married in Michigan during the Year 1879; the Per Cent. of Total Number of Persons Married at each Age and Period of Age, and the Per Cent. of each Sex at each Age and Period of Age.*

AGES IN YEARS AND PERIODS.	MARRIAGES, 1879.						
	Total Number of Persons Married.	MALES.			FEMALES.		
		Number Married.	Per Cent. of Total Marri- ages.	Per Cent. of Persons Married at Correspond- ing Ages.	Number Married.	Per Cent. of Total Marri- ages.	Per Cent. of Persons Married at Correspond- ing Ages.
All ages.....	20,450	13,225	100.00	50.00	13,225	100.00	50.00
12.....	2	—	—	—	2	.01	100.00
13.....	4	—	—	—	4	.03	100.00
14.....	23	—	—	—	23	.17	100.00
15.....	117	—	—	—	117	.88	100.00
16.....	671	2	.02	.30	669	5.06	92.70
17.....	1,065	11	.08	1.03	1,054	7.97	98.97
18.....	1,607	83	.63	5.16	1,524	11.52	94.84
19.....	1,635	221	1.67	13.35	1,414	10.84	86.65
20.....	1,967	575	4.35	29.28	1,392	10.53	70.77
21 to 25.....	8,524	4,863	36.77	57.05	3,661	27.68	42.95
25 to 30.....	5,510	3,905	29.53	70.87	1,605	12.14	29.13
30 to 35.....	2,085	1,505	11.38	72.18	580	4.39	27.82
35 to 40.....	1,152	728	5.50	63.19	424	3.21	36.81
40 to 45.....	641	404	3.05	63.03	237	1.79	30.97
45 to 50.....	462	305	2.32	66.02	157	1.19	33.96
50 to 55.....	290	195	1.47	67.24	95	.72	32.76
55 to 60.....	183	123	.93	67.21	60	.45	32.79
60 to 65.....	135	89	.67	65.83	46	.35	34.06
65 to 70.....	83	68	.51	81.93	15	.11	18.07
70 to 75.....	51	41	.31	80.39	10	.08	19.61
75 to 80.....	19	17	.13	89.47	2	.02	10.53
80 and over.....	1	—	—	—	1	.01	100.00
Unknown.....	203	90	.68	44.33	113	.85	55.66
Under 15.....	29	—	—	—	29	.22	100.00
15 to 20.....	5,115	317	2.40	6.20	4,798	36.28	93.80
20 to 25.....	10,491	5,488	41.12	51.83	5,003	38.31	48.17

The number of males and of females married at each age and the excess of the sexes may be seen in Exhibit 2. Under 22 years of age there is an excess of females and from that age to 82 there is an excess of males. The largest

number of males was married at the age of 22 years, and the largest number of females at the age of 18 years.

EXHIBIT 2.—*Number of Persons Returned as having been Married in Michigan in 1879, by Sex, and Excess of the Sexes, by Age in Years.*

Ages in Years.	PERSONS MARRIED IN 1879.			EXCESS.		Ages in Years.	PERSONS MARRIED IN 1879.			EXCESS.	
	Total.	Males.	Fe-males.	Males.	Fe-males.		Total.	Males.	Fe-males.	Males.	Fe-males.
All ages	26,450	13,225	13,225	-----	-----	46	99	64	35	29	-----
12	2	-----	2	-----	2	47	85	57	28	29	-----
13	4	-----	4	-----	4	48	79	55	24	31	-----
14	23	-----	23	-----	23	49	71	43	28	15	-----
15	117	-----	117	-----	117	50	82	50	32	18	-----
16	671	2	669	-----	667	51	38	29	9	20	-----
17	1,065	11	1,054	-----	1,043	52	67	43	24	19	-----
18	1,607	83	1,524	-----	1,441	53	55	38	17	21	-----
19	1,635	221	1,414	-----	1,213	54	48	35	13	22	-----
20	1,967	575	1,392	-----	817	55	37	25	12	13	-----
21	2,264	1,079	1,185	-----	106	56	46	30	16	14	-----
22	2,355	1,321	1,034	287	-----	57	29	21	8	13	-----
23	2,027	1,206	821	385	-----	58	40	26	14	12	-----
24	1,878	1,257	621	636	-----	59	31	21	10	11	-----
25	1,540	1,023	517	506	-----	60	34	24	10	14	-----
26	1,272	925	347	578	-----	61	21	17	4	13	-----
27	1,027	757	270	487	-----	62	32	16	16	-----	-----
28	935	665	270	395	-----	63	27	17	10	7	-----
29	736	535	201	334	-----	64	21	15	6	9	-----
30	682	504	178	326	-----	65	19	15	4	11	-----
31	416	317	99	218	-----	66	18	14	4	10	-----
32	400	278	122	156	-----	67	16	11	5	6	-----
33	312	217	95	122	-----	68	18	16	2	14	-----
34	275	189	86	103	-----	69	12	12	-----	12	-----
35	322	202	120	82	-----	70	12	9	3	6	-----
36	231	154	77	77	-----	71	7	4	3	1	-----
37	191	126	65	61	-----	72	19	16	3	13	-----
38	243	139	104	35	-----	73	8	7	1	6	-----
39	165	107	58	49	-----	74	5	5	-----	5	-----
40	228	146	82	64	-----	75	10	9	1	8	-----
41	102	66	36	30	-----	76	4	3	1	2	-----
42	114	71	43	28	-----	77	2	2	-----	2	-----
43	92	53	39	14	-----	78	1	1	-----	1	-----
44	105	68	37	31	-----	79	2	2	-----	2	-----
45	128	86	42	44	-----	82	1	-----	1	-----	1
						Unk..	203	90	113	-----	23

VITAL STATISTICS OF MICHIGAN, 1879.

TABLE VIII.—*Exhibiting for the State and Counties, by Sex, the Nativity and Age in Periods of Years, of Persons Returned as having been Married in Michigan during the year ending December 31, 1879.*

STATE AND COUNTIES.	Number of Couples Married, 1879.	NATIVITY OF PERSONS MARRIED, 1879, STATED BY COUPLES.										SEX STATED.	MARRIAGES AT DIFFERENT AGES, STATED IN PERIODS OF YEARS, 1879.															Unknown.
		Both Native.	Both Foreign.	For- eign Ma-les, Fe- ma-les.	For- eign Na- tive Fe- ma-les.	FEMALES UNKNOWN.		MALES UNKNOWN.																				
						Na- tive.	eign.	Fe- ma-les.	Na- tive.																			
										For- eign.	Na- tive.																	
STATE.....	13,325	8,484	1,680	1,793	979	a 80	b 24	c 47	d 6	e 113	Males.... Females....	317 5,433 4,857	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80 and over.	90 113			
Alcona.....	19	6	6	3	4	.....	.....	.....	.....	.....	Males.... Females....	..... 4	7 8	4 3	4	1 3	1 1	1 1	.....	.....	1	.....	.....	.....	.....
Allegan.....	315	260	13	24	17	.....	.....	1	.....	.....	Males.... Females....	11 130	137 110	86 15	12 11	15 5	12 3	6 2	6 2	3 3	4 2	1 1	.....	.....		
Alpena.....	63	12	21	9	11	.....	.....	.....	.....	.....	Males.... Females....	16	19 13	12 35	12 9	4 4	1 1	.....	.....	.....	.....	.....	.....	.....	.....
Antrim.....	45	17	11	12	5	.....	.....	.....	.....	.....	Males.... Females....	1 24	20 9	13 6	4 1	2 2	1 1	.....	1 1	1 1	1 .....	.....	.....	.....	1 1
Baraga.....	9	3	2	3	1	.....	.....	.....	.....	.....	Males.... Females....	..... 4	2 4	4	1 .....	.....	1 1	.....	.....	.....	.....	.....	.....	.....	.....
Barry.....	246	211	1	22	11	.....	1	.....	.....	.....	Males.... Females....	7 106	119 100	65 21	25 8	7 3	6 3	9 2	3 2	3 2	4 1	.....	.....	.....	
Bay.....	159	51	50	33	20	.....	.....	.....	.....	.....	Males.... Females....	3 57	52 60	23 17	23 5	12 8	7 5	7 4	3 3	.....	1	.....	.....	.....	
Benzie.....	31	24	1	6	.....	.....	.....	.....	.....	.....	Males.... Females....	..... 13	10 12	8 1	7 3	2	2 1	2 1	.....	.....	1	.....	.....	.....	1 1
Berrien.....	486	364	20	44	20	.....	.....	.....	.....	1	Males.... Females....	19 189	211 186	123 53	53 18	31 14	18 12	12 7	8 2	3 1	3 5	2 1	2 .....	.....			
Branch.....	311	275	9	23	4	.....	.....	.....	.....	.....	Males.... Females....	9 109	133 101	20 25	18 16	9 12	9 0	9 4	3 1	4 2	5 4	1 1	2 .....	.....	30 30
Calhoun.....	330	286	4	25	10	Males.... Females....	4 95	135 149	26 45	28 31	9 7	7 7	3 6	7 6	2 1	2 1	1			

MARRIAGES—BY COUNTIES, NATIVITY, SEX, AND AGE.

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Cass.....	232	208	3	11	6	3	1	Males....	6	101	73	23	9	5	3	7	1	1	1	1	1
									Females...	78	105	25	8	6	4	
Charlevoix...	34	16	7	8	3	Males....	11	14	6	2	1	
									Females...	20	7	4	1	.....	.....	.....	.....	.....	.....	.....	.....
Cheboygan...	41	15	6	13	6	1	.....	.....	Males....	1	19	11	7	2	.....	1	.....	.....	.....	.....	.....
									Females...	20	16	3	1	.....	.....	.....	.....	.....	.....	.....	.....
Chippewa...	19	4	9	2	3	.....	1	.....	Males....	1	3	11	2	2	.....	.....	.....	.....	.....	.....	.....
									Females...	11	4	3	.....	1	.....	.....	.....	.....	.....	.....	.....
Clare.....	27	18	3	2	3	.....	.....	1	Males....	2	5	12	3	.....	.....	2	1	.....	1	.....	1
									Females...	8	3	4	1	.....	.....	.....	.....	.....	.....	.....	.....
Clinton.....	229	186	2	23	10	3	1	1	Males....	5	101	69	28	10	8	8	4	3	1	.....	1
									Females...	86	84	27	9	11	5	3	1	2	.....	.....	.....
Crawford...	2	2	.....	.....	.....	.....	.....	.....	Males....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
									Females...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Delta.....	60	19	18	18	5	.....	.....	.....	Males....	1	17	35	6	.....	1	.....	.....	.....	.....	.....	.....
									Females...	30	23	5	1	1	.....	.....	.....	.....	.....	.....	.....
Eaton.....	275	244	4	17	8	2	.....	.....	Males....	10	114	82	24	15	10	3	8	1	3	4	.....
									Females...	108	96	29	12	9	4	6	2	1	.....	.....	.....
Emmet.....	38	24	5	1	5	.....	.....	.....	Males....	1	15	6	5	5	1	2	.....	.....	.....	.....	.....
									Females...	15	11	5	1	3	.....	.....	.....	.....	.....	.....	.....
Genesee.....	306	265	16	48	25	2	1	4	Males....	13	147	108	34	19	17	9	7	1	6	4	1	
									Females...	148	118	43	20	10	9	3	3	3	8	.....	.....
Gladwin...	3	2	1	.....	.....	.....	.....	.....	Males....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
									Females...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gr. Traverse	77	44	9	15	9	.....	.....	.....	Males....	1	35	25	5	3	3	1	.....	.....	.....	.....	.....
									Females...	33	33	8	2	1	.....	.....	.....	.....	.....	.....	.....
Gratiot.....	177	148	2	17	8	.....	2	.....	Males....	8	76	62	16	8	6	2	5	1	.....	.....	.....
									Females...	87	57	11	5	4	8	1	.....	.....	.....	.....	.....
Hillsdale...	380	349	4	11	9	2	.....	.....	Males....	10	173	92	48	17	12	5	6	4	4	5	4
									Females...	125	102	52	18	10	7	2	6	3	2	.....	.....
Houghton...	170	15	104	42	9	.....	.....	.....	Males....	1	61	64	22	13	4	2	1	1	1	.....	.....
									Females...	67	64	18	9	6	1	4	1	.....	.....	.....	.....
Huron.....	138	20	62	22	27	.....	.....	f 1	Males....	3	62	45	9	12	1	2	.....	.....	.....	.....	.....
									Females...	69	46	12	2	4	1	.....	.....	.....	.....	.....	.....

^a Includes 1 female "America."
^b Includes 3 females "America."
^c Includes 1 couple "America."

^a Includes 3 males "America,"
^b Includes 2 males "America,"
^c Includes 2 males "America."

^a Includes 1 female "America."

^b Includes 3 males "America."

^c Includes 3 females "America."

^d Includes 2 males "America."

TABLE VIII.—CONTINUED.—Marriages by Counties, Nativity, and Periods of Age.

COUNTIES.	Number of Couples Married, 1879.	NATIVITY OF PERSONS MARRIED, 1879, STATED BY COUPLES.						SEX STATED.	MARRIAGES AT DIFFERENT AGES, STATED IN PERIODS OF YEARS, 1879.																		
		Both Native.	Both Foreign.	For- eign Males. Fe- males.	For- eign Na- tive Males. Fe- males.	FEMALES UNKNOWN.			MALES UNKNOWN.		Both Unknown.																
						UNKNOWN.			UNKNOWN.																		
						Na- tive.	For- eign.		Na- tive.	For- eign.																	
Oakland.....	304	292	8	34	23	.....	.....	3	4	Males..... Females.....	6 85	125 198	20 to 25.	25 30.	30 35.	35 40.	40 45.	45 50.	50 55.	55 60.	60 65.	65 70.	70 75.	75 80.	80 and over.	Unknown.
Oceana.....	85	61	6	8	9	.....	.....	.....	1	Males..... Females.....	1 43	28 20	25 30.	30 35.	35 40.	40 45.	45 50.	50 55.	55 60.	60 65.	65 70.	70 75.	75 80.	80 and over.	Unknown.	
Ogemaw.....	Males..... Females.....
Ontonagon..	9	3	.....	4	1	.....	.....	.....	.....	Males..... Females.....	2 6	4 6	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....
Oscoda.....	94	89	11	15	7	.....	.....	.....	.....	Males..... Females.....	2 48	26 22	25 30.	30 35.	35 40.	40 45.	45 50.	50 55.	55 60.	60 65.	65 70.	70 75.	75 80.	80 and over.	Unknown.	
Otsego.....	7	4	.....	1	.....	.....	.....	.....	2	Males..... Females.....	3 4	1 1	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....
Ottawa.....	244	130	51	30	22	1	2	.....	2	Males..... Females.....	10 57	99 100	25 30.	30 35.	35 40.	40 45.	45 50.	50 55.	55 60.	60 65.	65 70.	70 75.	75 80.	80 and over.	Unknown.	
Presque L..	4	.....	4	.....	.....	.....	.....	.....	.....	Males..... Females.....	2 .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....
Roscommon..	17	9	2	5	1	.....	.....	.....	.....	Males..... Females.....	4 5	3 3	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....
Saginaw.....	450	191	98	104	54	2	.....	.....	.....	Males..... Females.....	9 158	188 192	25 30.	30 35.	35 40.	40 45.	45 50.	50 55.	55 60.	60 65.	65 70.	70 75.	75 80.	80 and over.	Unknown.	
Sanilac.....	147	87	59	84	17	.....	.....	.....	.....	Males..... Females.....	3 72	53 41	25 30.	30 35.	35 40.	40 45.	45 50.	50 55.	55 60.	60 65.	65 70.	70 75.	75 80.	80 and over.	Unknown.	
Schoolcraft..	7	4	1	1	1	.....	.....	.....	.....	Males..... Females.....	7	4 .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....
Shiawassee..	154	116	13	18	6	1	Males..... Females.....	1 62	72 53	25 30.	30 35.	35 40.	40 45.	45 50.	50 55.	55 60.	60 65.	65 70.	70 75.	75 80.	80 and over.	Unknown.		

MARRIAGES—BY COUNTIES, NATIVITY, SEX, AND AGE.

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St. Clair.....	384	101	107	108	50	3	5	• 3	2	5	Males..... Females.....	7 150	174 145	117 50	32 13	16 4	8 6	8 2	2 2	1 1																											
St. Joseph...	277	224	9	21	5	2	.....	.....	.....	6	Males..... Females.....	8 114	117 98	80 33	34 17	11 9	8 3	10 2	4 2	1																								
Tuscola.....	213	107	35	37	32	.....	.....	.....	.....	1	Males..... Females.....	5 94	83 80	64 13	12 10	12 7	9 4	6 2	1 1	1 1																							
Van Buren...	246	305	3	22	11	4	.....	1	.....	.....	Males..... Females.....	14 117	107 77	65 23	21 8	13 7	6 4	6 5	2 2	3 8	.....																									
Washtenaw..	319	229	28	40	21	1	.....	.....	.....	.....	Males..... Females.....	2 74	132 133	116 59	31 15	14 7	8 2	9 3	2 2	.....	.....																								
Wayne.....	1,308	547	313	223	153	8	• 8	• 7	1	• 43	Males..... Females.....	22 330	507 597	389 205	106 72	87 37	51 31	29 11	20 7	13 6	5 12																										
Wexford....	61	30	8	17	3	.....	.....	2	.....	1	Males..... Females.....	..... 27	23 16	16 8	13 6	3 6	1 2	1 2	.....	.....	.....																							
• No returns from county clerk.												• 1 male "America."												• Includes 2 females "America."												• Includes 1 couple "America."											

a No returns from county clerk. b 1 female "America." c 1 male "America." d Includes 2 females "America." e Includes 1 couple "America."

The number of males and females who were married in this State under the age of 21 years may be seen in Table IX. There were 7,109 persons, of which number 892 only were males, and 6,217 were females. This table also shows the counties in which those marriages of persons under the lawful age took place. According to the returns 159 persons were thus illegally married in 1879.

TABLE IX.—*Exhibiting, for the State and Counties, the Total Number, and Number of each Sex under 21 years of Age; and the Number of each Sex at each Age under that of 21 years, Returned as having been Married in Michigan during the year ending December 31, 1879.*

STATE AND COUNTIES.	PERSONS MARRIED UNDER 21 YEARS OF AGE, 1879.			AGES OF MALES, 1879.					AGES OF FEMALES, 1879.								
	Total.	Males.	Fe- males.	Twenty.	Nineteen.	Eighteen.	Seventeen. ^a	Sixteen. ^a	Twenty.	Nineteen.	Eighteen.	Seventeen.	Sixteen.	Fifteen. ^a	Fourteen. ^a	Thirteen. ^a	Twelve. ^a
STATE.....	7,109	892	6,217	575	221	83	11	2	1,390	1434	1524	1054	669	117	23	4	2
Alcona.....	7	-----	7	-----	-----	-----	-----	-----	3	2	2	-----	-----	-----	-----	-----	-----
Allegan.....	185	28	167	17	8	3	-----	-----	37	38	47	22	21	1	1	-----	-----
Alpena.....	21	-----	21	-----	-----	-----	-----	-----	5	5	5	1	4	1	-----	-----	-----
Antrim.....	29	2	27	1	1	-----	-----	-----	3	4	5	7	7	1	-----	-----	-----
Baraga.....	5	-----	5	-----	-----	-----	-----	-----	1	-----	4	-----	-----	-----	-----	-----	-----
Barry.....	158	20	138	13	4	2	-----	1	32	28	34	23	18	2	1	-----	-----
Bay.....	78	8	70	5	2	1	-----	-----	13	16	20	9	8	3	1	-----	-----
Benzle.....	16	3	13	3	-----	-----	-----	-----	1	2	1	6	2	-----	1	-----	-----
Berrien.....	270	43	227	24	14	5	-----	-----	45	46	64	41	30	1	-----	-----	-----
Branch.....	157	27	130	18	4	4	1	-----	21	38	33	22	14	2	-----	-----	-----
Calhoun.....	157	22	135	18	4	-----	-----	-----	40	37	33	17	7	1	-----	-----	-----
Casa.....	124	18	106	12	4	2	-----	-----	28	24	29	14	9	-----	-----	2	-----
Charlevoix.....	22	1	21	1	-----	-----	-----	-----	1	3	8	2	5	1	1	-----	-----
Cheboygan.....	30	3	27	2	-----	1	-----	-----	7	2	8	6	4	-----	-----	-----	-----
Chippewa.....	14	1	13	-----	1	-----	-----	-----	2	5	2	4	-----	-----	-----	-----	-----
Clare.....	15	2	13	-----	1	-----	1	-----	5	1	1	3	3	-----	-----	-----	-----
Clinton.....	123	21	102	16	5	-----	-----	-----	16	25	26	21	11	3	-----	-----	-----
Crawford.....	2	-----	2	-----	-----	-----	-----	-----	-----	-----	-----	2	-----	-----	-----	-----	-----
Delta.....	37	2	35	1	-----	1	-----	-----	5	9	5	6	7	3	-----	-----	-----
Eaton.....	166	24	142	14	8	2	-----	-----	34	28	32	24	24	-----	-----	-----	-----
Emmet.....	20	2	18	1	1	-----	-----	-----	3	4	4	4	3	-----	-----	-----	-----
Genesee.....	216	32	184	19	8	5	-----	-----	36	47	45	33	22	1	-----	-----	-----
Gladwin.....	2	-----	2	-----	-----	-----	-----	-----	-----	1	-----	-----	-----	1	-----	-----	-----
Grand Traverse.....	42	3	39	2	-----	1	-----	-----	6	5	11	9	7	1	-----	-----	-----
Gratiot.....	127	19	108	11	6	2	-----	-----	21	14	23	18	27	4	1	-----	-----

^a Not legal marriages. For law and penalty to persons solemnizing, see sections (4719), (4720), (4725), and (4729), Compiled Laws of 1871, pages 1462 and 1463.

MARRIAGES—PERSONS AGED UNDER TWENTY-ONE YEARS. 93

TABLE IX.—CONTINUED.—*Persons Married under 21 Years of Age.*

COUNTIES.	PERSONS MARRIED UNDER 21 YEARS OF AGE, 1879.			AGES OF MALES, 1879.					AGES OF FEMALES, 1879.								
	Total.	Males.	Fe- males.	Twenty.	Nineteen.	Eighteen.	Seventeen. ^a	Sixteen. ^a	Twenty.	Nineteen.	Eighteen.	Seventeen.	Sixteen.	Fifteen. ^a	Fourteen. ^a	Thirteen. ^a	Twelve. ^a
Hillsdale.....	193	29	164	19	7	3	---	---	39	42	47	21	14	1	---	---	---
Houghton.....	90	4	86	3	1	---	---	---	19	18	18	23	8	---	---	---	---
Huron.....	91	6	85	3	3	---	---	---	16	23	17	11	11	5	2	---	---
Ingham.....	177	25	152	15	7	3	---	---	33	34	44	23	15	3	---	---	---
Ionia.....	198	32	166	22	8	2	---	---	31	35	49	27	17	6	1	---	---
Iosco.....	29	4	25	2	2	---	---	---	4	6	5	2	7	1	---	---	---
Isabella.....	40	2	38	2	---	---	---	---	6	3	12	8	5	3	1	---	---
Isle Royal..... ^b	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Jackson.....	178	28	150	15	7	5	1	---	41	28	43	24	13	---	---	---	1
Kalamazoo.....	117	22	95	13	7	2	---	---	19	24	31	11	9	1	---	---	---
Kalkaska.....	12	1	11	---	1	---	---	---	---	---	5	4	2	---	---	---	---
Kent.....	303	33	270	22	6	4	1	---	63	61	73	43	24	5	---	---	1
Keweenaw.....	7	1	6	1	---	---	---	---	---	---	2	2	1	1	---	---	---
Lake.....	14	1	13	1	---	---	---	---	2	2	2	3	2	2	---	---	---
Lapeer.....	156	24	132	15	7	2	---	---	26	27	39	23	17	---	---	---	---
Leelanaw.....	23	5	18	3	2	---	---	---	---	2	7	5	4	---	---	---	---
Lenawee.....	209	37	172	28	7	2	---	---	49	47	42	21	9	3	1	---	---
Livingston.....	66	11	55	9	---	2	---	---	15	8	12	12	8	---	---	---	---
Mackinac.....	12	1	11	1	---	---	---	---	2	1	1	5	1	1	---	---	---
Macomb.....	124	8	116	6	1	1	---	---	24	33	33	11	8	3	1	---	---
Manistee.....	44	1	43	---	1	---	---	---	7	13	11	9	3	---	---	---	---
Manitou.....	4	1	3	1	---	---	---	---	1	---	---	2	---	---	---	---	---
Marquette.....	76	4	72	4	---	---	---	---	16	15	16	15	5	5	---	---	---
Mason.....	45	5	40	4	1	---	---	---	8	6	9	12	2	1	2	---	---
Mecosta.....	56	5	51	4	---	1	---	---	8	14	8	11	8	2	---	---	---
Menominee.....	30	1	29	1	---	---	---	---	7	8	6	2	5	---	---	1	---
Midland.....	35	3	32	1	---	2	---	---	6	2	5	8	8	3	---	---	---
Missaukee.....	3	1	2	---	---	---	1	---	---	---	1	1	---	---	---	---	---
Monroe.....	501	19	482	12	6	1	---	---	45	45	38	35	14	3	1	1	---
Montcalm.....	154	29	125	18	8	3	---	---	24	19	30	23	24	3	2	---	---
Muskegon.....	106	11	95	8	2	1	---	---	18	19	25	18	13	2	---	---	---
Newaygo.....	68	8	60	6	---	---	2	---	11	11	17	11	8	2	---	---	---
Oakland.....	130	14	116	8	4	1	1	---	31	29	24	22	10	---	---	---	---
Oceana.....	52	3	49	2	---	1	---	---	6	11	14	9	6	3	---	---	---

^a Not legal marriages. For law and penalty to persons solemnizing, see sections (4719), (4720), (4721), and (4722), Compiled Laws of 1871, pages 1462 and 1463.

^b No returns from county clerk.

TABLE IX.—CONTINUED.—*Persons Married under 21 Years of Age.*

COUNTIES.	PERSONS MARRIED UNDER 21 YEARS OF AGE, 1879.			AGES OF MALES, 1879.					AGES OF FEMALES, 1879.								
	Total.	Males.	Fe- males.	Twenty.	Nineteen.	Eighteen.	Seventeen ^a	Sixteen ^a	Twenty.	Nineteen.	Eighteen.	Seventeen.	Sixteen.	Fifteen ^a	Fourteen ^a	Thirteen ^a	Twelve ^a
Ogemaw	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ontonagon	4	-----	4	-----	-----	-----	-----	-----	2	1	-----	1	-----	-----	-----	-----	-----
Osceola	60	6	54	4	2	-----	-----	-----	6	10	9	17	8	4	-----	-----	-----
Otsego	5	-----	5	-----	-----	-----	-----	-----	1	1	1	-----	1	1	-----	-----	-----
Ottawa	134	18	116	8	7	2	1	-----	29	29	19	29	7	3	-----	-----	-----
Presque Isle	2	-----	2	-----	-----	-----	-----	-----	-----	1	-----	-----	1	-----	-----	-----	-----
Roscommon	7	-----	7	-----	-----	-----	-----	-----	2	1	1	1	2	-----	-----	-----	-----
Saginaw	238	25	213	16	8	1	-----	-----	55	50	54	30	15	9	-----	-----	-----
Sanilac	98	8	90	5	3	-----	-----	-----	18	18	15	26	9	4	-----	-----	-----
Schoolcraft	7	-----	7	-----	-----	-----	-----	-----	-----	3	1	-----	2	1	-----	-----	-----
Shiawassee	91	8	83	7	1	-----	-----	-----	21	20	16	14	9	2	1	-----	-----
St. Clair	216	20	196	13	7	-----	-----	-----	46	40	53	38	18	-----	1	-----	-----
St. Joseph	164	21	143	13	6	2	-----	-----	29	32	33	31	17	1	-----	-----	-----
Tuscola	128	16	112	11	4	-----	1	-----	18	21	37	16	15	4	1	-----	-----
Van Buren	167	29	138	15	8	4	1	1	21	31	38	29	16	2	1	-----	-----
Washtenaw	128	15	113	12	1	2	-----	-----	30	33	24	13	4	-----	-----	-----	-----
Wayne	548	65	483	43	15	7	-----	-----	153	162	93	54	20	1	-----	-----	-----
Wexford	36	1	35	1	-----	-----	-----	-----	8	8	2	6	9	-----	2	-----	-----

^a Not legal marriages. For law and penalty to persons solemnizing, see sections (4719), (4720), (4728), and (4729), Compiled Laws of 1871, pages 1462 and 1463.

^b No returns from county clerk.

MANNER OF UNION BY AGES.

Table X. is designed to show the number of persons of each sex who married those of the opposite sex at different periods of age. In order to trace the manner of union by ages, the reader may begin at the column headed "Total Males," where it is seen that 317 males were married under 20 years of age, and that of this number 245 married females under 20, that 65 married females 20 to 25, and that 6 married females 25 to 30. In like manner the other numbers in this column may be read. The line headed "Total Females," is read as follows: 4,827 females were married under 20 years of age, of which number 245 married males under 20, and 2,805 married males 20 to 25, etc. The last column shows the per cent. of males married at each period of age, and the bottom line the per cent. of females at each period of age. The largest per cent. of both males and females appears for those aged 20 to 25 years.

TABLE X.—*Exhibiting the Number of each Sex at each Period of Age who were married in Michigan during the Year 1879; the Number of each Sex at each Period of Age who were united to the opposite Sex at each Period of Age; and the Per Cent. of Brides and of Bridegrooms at each Period of Age to Total at All Ages.*

AGES OF MALES, 1879.	AGES OF FEMALES, 1879.															Total Males.	Per Cent. of Grooms at each Age.
	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unkn.		
Under 20....	245	65	6	---	---	---	---	---	---	---	---	---	---	---	1	317	2.40
20 to 25.....	2,805	2,331	248	31	10	4	---	---	---	---	---	---	---	---	9	5,438	41.12
25 to 30.....	1,325	1,766	647	111	40	5	2	---	1	---	---	---	---	---	8	3,905	29.53
30 to 35.....	316	583	362	151	65	17	5	---	---	1	---	1	---	---	4	1,505	11.38
35 to 40.....	85	184	193	125	94	34	9	1	---	1	---	---	---	---	2	728	5.50
40 to 45.....	23	73	80	76	73	57	17	5	---	---	---	---	---	---	---	404	3.06
45 to 50.....	14	28	40	47	68	50	42	10	3	1	---	1	---	---	1	305	2.31
50 to 55.....	6	14	17	23	31	32	35	26	5	4	---	2	---	---	---	195	1.47
55 to 60.....	2	4	9	7	25	18	19	19	12	5	1	---	---	---	2	123	.93
60 to 65.....	1	2	2	4	10	9	16	15	17	9	3	---	---	---	1	89	.67
65 to 70.....	1	1	1	1	6	7	8	14	14	9	5	1	---	---	---	68	.51
70 to 75.....	1	---	---	3	2	4	3	4	5	11	3	3	1	1	---	41	.31
75 to 80.....	1	---	---	---	---	---	1	1	2	5	3	2	1	---	---	17	.13
80 and over.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unknown....	2	2	---	1	---	---	---	---	---	---	---	---	---	---	85	90	.68
Total Females. }	4,827	5,053	1,605	580	424	237	157	95	60	46	15	10	2	1	113	13,225	-----
Per Ct. of Brides at each age. }	36.50	38.21	12.14	4.39	3.21	1.79	1.19	.72	.45	.35	.11	.07	.01	.01	.85	-----	100.00

GREAT DIFFERENCES IN AGES OF PERSONS MARRIED.

Table XI., which follows, presents some curious features with reference to the ages and to the disparities of age of those married in 1879. The greatest disparity between the ages of the parties returned as having been married during the year was that of a male of 79 to a female of 17 years. This marriage took place in Branch county. Another marriage occurred in Kent county in which case the bridegroom is reported to have been 30 years, and the bride 70 years old.

TABLE XI.—*Marriages with Great Disparity of Ages of Persons Married, in Michigan during the Year ending December 31, 1879.*

COUNTIES.	BRIDEGROOM OLDEST,—1879.				BRIDE OLDEST,—1879.			
	OCCUPATION OF BRIDEGROOM.	BIRTHPLACE.		AGE.	OCCUPATION OF BRIDEGROOM.	BIRTHPLACE.		AGE.
		Bridegroom.	Bride.			Bridegroom.	Bride.	
Allegan.....	Track Supt.....	Pennsylvania...	Michigan.....	46 24				
Alpena.....	Trader.....	Galway .....	.....	51 30				
Antrim.....	Farmer.....	.....	.....	63 43				
Baraga.....	Farmer.....	.....	.....	41 20				
Barry.....	Farmer.....	.....	.....	51 20				
Bay	Brewer.....	.....	.....	32 16				
Benzie.....	Farmer.....	.....	.....	61 17	Farmer.....	.....	.....	31 49
Berrien.....	Farmer.....	.....	.....	67 33	Railroading.....	.....	.....	23 41
Branch.....	Grocer.....	.....	.....	79 17	Farmer.....	.....	.....	47 70
Calhoun.....	Farmer.....	.....	.....	57 17				
Cass.....	Shoe-maker.....	.....	.....	45 23				
Charlevoix.....	Farmer.....	.....	.....	44 18	Farmer.....	.....	.....	31 64
Clare.....	.....	.....	.....	.....	Farmer.....	.....	.....	23 34
Clinton.....	Farmer.....	62 37	Farmer.....	40 50
Eaton.....	Farmer.....	67 19	Farmer.....	52 71

MARRIAGES—DISPARITY OF AGES.

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Female	Female	Male	Male	Female	Male	Female	Male
Emmett.....	Farmer.....	40	16	Farmer.....	28	44	
Genesee.....	Farmer.....	40	16	Carpenter.....	28	30	
Grand Traverse.....	Light-house-keeper.....	71	16	Reg. of Deeds.....	33	44	
Graffiot.....	Mechanic.....	40	16	Salesman.....	30	40	
Hillsdale.....	Farmer.....	54	23	Laborer.....	30	45	
Houghton.....	Miner.....	37	20	Farmer.....	20	34	
Huron.....	Farmer.....	35	14	Farmer.....	23	38	
Ingham.....	Farmer.....	46	17	Unknown.....			
Ionia.....	Merchant.....	49	17	Clerk.....	27	32	
Iosco.....	Laborer.....	48	24	Farmer.....	30	70	
Isabella.....	Farmer.....	39	17	Farmer.....	29	45	
Jackson.....	Laborer.....	52	20	Col. at a Ferry.....	32	41	
Kalamazoo.....	Banker.....	74	43	Farmer.....	28	38	
Kent.....	Farmer.....	63	26	Druggist.....	33	45	
Lake.....	Carpenter.....	38	17	Laborer.....	26	38	
Lapeer.....	Farmer.....	42	21	Miner.....	23	35	
Leclanaw.....	Farmer.....	62	21	Sailor.....	27	38	
Lenawee.....	Farmer.....	56	18	Farmer.....	40	52	
Livingston.....	Farmer.....	58	32	Farmer.....			
Mackinac.....	Farmer.....	34	17				
Macomb.....	Farmer.....	41	20				
Manistee.....	Artist.....	39	24				
Marquette.....	Miner.....	38	19				
Mason.....							
Mecosta.....	Mech. and Engin'r.....	48	23				
Menominee.....	Farmer.....	54	17				
Midland.....	Trader.....	53	33				

VITAL STATISTICS OF MICHIGAN, 1879.

TABLE XI.—CONTINUED.—*Marriages with great Disparity of Ages.*

COUNTIES.	BRIDEGROOM OLDEST,—1879.				BRIDE OLDEST,—1879.				
	OCCUPATION OF BRIDEGROOM.	BIRTHPLACE.		AGE.	OCCUPATION OF BRIDEGROOM.	BIRTHPLACE.		AGE.	
		Bridegroom.	Bride.			Bridegroom.	Bride.		
Monroe ..	Laborer ..	.....	.....	59	Farmer ..	.....	.....	25	34
Montcalm ..	Farmer ..	.....	.....	46	.....	.....	.....	.....	.....
Muskegon ..	Mechanic ..	.....	.....	51	Laborer ..	.....	.....	22	36
Newaygo ..	Telegraph Operat'r	.....	.....	39	Laborer ..	.....	.....	38	62
Oakland ..	Farmer ..	.....	.....	45	Lawyer ..	.....	.....	24	37
Oceana ..	Farmer ..	.....	.....	63	.....	.....	.....	.....	.....
Ontonagon ..	Carpenter ..	.....	.....	44	.....	.....	.....	.....	.....
Oscoda ..	Builder ..	.....	.....	46	.....	.....	.....	.....	.....
Ottawa ..	Farmer ..	.....	.....	51	.....	.....	.....	.....	.....
Saginaw ..	Indian Missionary ..	.....	.....	52	Cook ..	.....	.....	25	37
Sanilac ..	Farmer ..	.....	.....	65	Farmer ..	.....	.....	22	40
Shiawassee ..	Farmer ..	.....	.....	65	.....	.....	.....	.....	.....
St. Clair ..	Farmer ..	.....	.....	52	Farmer ..	.....	.....	21	44
St. Joseph ..	Farmer ..	.....	.....	42	Shoe-maker ..	.....	.....	24	38
Tuscola ..	Gunsmith ..	.....	.....	54	.....	.....	.....	.....	.....
Van Buren ..	Farmer ..	.....	.....	50	Farmer ..	.....	.....	25	49
Washtenaw ..	Farmer ..	.....	.....	52	.....	.....	.....	.....	.....
Wayne ..	Farmer ..	.....	.....	53	Laborer ..	.....	.....	26	58
.....	Mason ..	.....	.....	37	.....	.....	.....	.....	.....

EXHIBIT D.—*Number of Inhabitants to One Marriage, as stated for Different Foreign Countries, the United States, and some of the States of the Union. The Statements for Michigan include only the Inhabitants of Counties Represented by Returns of Marriages.*

COUNTRY, STATE, OR CITY.	Year for which the Statement is made.	Inhabitants to one Marriage Annually.	COUNTRY, STATE, OR CITY.	Year for which the Statement is made.	Inhabitants to one Marriage Annually.
Austria.....		117	Massachusetts..... ^b	1872	94.9
Bavaria.....		160	Massachusetts..... ^b	1873	95.6
Belgium.....		122	Massachusetts..... ^b	1874	103.5
Denmark.....		129	Massachusetts..... ^b	1875	121
England.....		122	Massachusetts..... ^b	1876	133
Finland.....		141	Massachusetts..... ^b	1877	136
France.....		122	Massachusetts..... ^b	1878	129
Greece.....		174	Massachusetts..... ^b	1879	124
Holland.....		129	New Jersey..... ^c	1870	135
Norway.....		124	New York City..... ^d	1869	108
Prussia.....		106	New York City..... ^e	1870	118
Russia.....		111	Michigan..... ^{fg}	1869	108
Saxony.....		107	Michigan..... ^f	1870	120
Spain.....		141	Michigan..... ^{fg}	1871	116
Sweden.....		135	Michigan..... ^{fg}	1872	120
United States.....	1860	122	Michigan..... ^{fg}	1873	114
New York.....	1860	135	Michigan..... ^{fg}	1874	116
Massachusetts.....	1865	97	Michigan..... ^{gh}	1874	109
Ohio.....		105	Michigan..... ^f	1875	118
Minnesota.....	1860	110	Michigan..... ^{fi}	1876	124
Minnesota.....	1868	107	Michigan..... ^{fi}	1877	130
Minnesota..... ^a	1870	116	Michigan..... ^{fi}	1878	127
Massachusetts..... ^b	1870	98.9	Michigan..... ⁱ	1879	127
Massachusetts..... ^b	1871	94.9			

- ^a Taken from Statistics of Minnesota for 1870.
^b Taken from Registration Report of Massachusetts for 1879, page 19.
^c There were 16 Townships from which no returns of marriages were received. Computed from data in Registration Report of New Jersey for 1870.
^d Computed from data in Report of Metropolitan Board of Health for 1869.
^e Computed from data in Report of Board of Health, of Health Department, for 1870.
^f Marriages corrected, for additional returns, up to January 15, 1881.
^g Population estimated from Censuses of 1860 and 1870.
^h Population as per Census of Michigan, 1874.
ⁱ Population estimated from Censuses of 1864 and 1874.

VITAL STATISTICS OF MICHIGAN, 1879.

TABLE XII.—Exhibiting, for the State and Counties, the Number of Marriages in Michigan during the Years 1876, 1877, 1878, and 1879, as first Returned to the State Department; the Number Returned since first compilation for the Years 1876, 1877, and 1878; for the Years 1873-1878 the Number Returned previous to January 15, 1881; the Population, 1874; Number of Inhabitants in 1874 to 1 Marriage in 1879, and the Per Cent. of Marriages in 1879 to Population in 1874.

STATE AND COUNTIES.	MARRIAGES.												Popula- tion, 1874, Repre- sented by Marriages in 1879.	Number of Inhabit- ants in 1874 to one Mar- riage in 1879.	Per Cent. of Mar- riages in 1879 to Popu- lation in 1874.	
	1873.	1874.	1875.	1876.		1877.		1878.		1879.						
	Number Re- turned previ- ous to Jan. 15, 1881.	Number Re- turned previ- ous to Jan. 15, 1881.	Number Re- turned previ- ous to Jan. 15, 1881.	Number Re- turned since first Re- com- plated.	Number Re- turned since first Re- com- plated.	Number Re- turned since first Re- com- plated.	Number Re- turned since first Re- com- plated.	Number Re- turned since first Re- com- plated.	Number Re- turned since first Re- com- plated.	Number Re- turned since first Re- com- plated.						
STATE.....	11,910	12,255	11,818	10,858	988	11,846	11,009	780	11,789	12,221	474	12,695	13,225	1,338,830	101	.99
Alcona	7	10	13	5	1	6	9	-----	9	6	-----	6	19	1,214	64	1.57
Allegan.....	239	278	299	306	-----	306	266	7	273	275	7	282	315	32,381	103	.97
Alpena.....	42	62	47	41	1	42	42	2	44	54	-----	54	53	4,807	91	1.10
Antrim	42	30	13	24	1	25	23	-----	23	32	-----	32	45	3,002	67	1.50
Baraga	-----	-----	9	11	-----	11	7	-----	7	7	-----	7	9	a	-----	-----
Barry	187	179	190	193	14	207	210	4	214	212	2	214	246	22,051	90	1.12
Bay	156	213	202	174	14	188	150	22	173	246	8	254	159	24,832	158	.64
Benzie	24	17	34	32	-----	32	23	-----	22	21	-----	21	31	2,663	56	1.16
Berrien.....	434	426	390	471	18	489	356	14	370	422	10	432	406	35,029	72	1.39
Branch	225	309	303	281	3	284	273	11	284	310	5	315	311	25,796	83	1.21
Calhoun.....	304	359	348	284	19	283	289	8	297	321	12	333	330	35,635	108	.93
Cass	226	213	195	203	15	217	175	6	181	302	11	213	233	20,525	86	1.13
Charlevoix.....	17	23	21	25	-----	25	31	-----	21	29	8	32	34	2,360	69	1.44
Cheboygan.....	11	16	16	32	-----	32	45	-----	48	40	2	43	41	3,070	75	1.34

MARRIAGES—CORRECTED BY COUNTIES.

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[illegible]

• Population of Baraga county is included in statement of population of Houghton county and cannot be ascertained.

Kalkanka
Thoungpon

• No returns of Marriages for 1879 from county clerk.

TABLE XII.—CONTINUED.—*Marriages Corrected by Counties.*

COUNTIES.	MARRIAGES.												Per Cent. of Mar- riages in 1879 to Popu- lation in 1874.
	1873.	1874.	1875.	1876.		1877.		1878.		1879.	Popula- tion, 1874, Re- pre- sented by Marriages in 1879.	Number of Inhab- itants in 1874 to one Mar- riage in 1879.	
	Number Re- turned previ- ous to Jan. 15, 1881.	Number Re- turned previ- ous to Jan. 15, 1881.	Number Re- turned previ- ous to Jan. 15, 1881.	Number as first Re- turned and Com- pleted.	Number Re- turned since first Re- turned and Com- pleted.	Number as first Re- turned and Com- pleted.	Number Re- turned since first Re- turned and Com- pleted.	Number as first Re- turned and Com- pleted.	Number Re- turned since first Re- turned and Com- pleted.	Number Re- turned.			
Leelanaw.....	44	46	33	35	35	46	46	27	27	33	6,031	152	.64
Lenawee.....	515	492	492	339	37	401	20	408	36	425	46,084	108	.92
Livingston.....	134	153	157	140	5	156	1	157	4	146	20,329	139	.72
Mackinac.....	8	28	13	11	11	17	17	25	25	18	1,406	83	1.20
Macomb.....	217	253	208	232	3	235	228	233	7	229	28,303	124	.81
Manistee.....	110	69	71	76	76	57	3	60	8	85	8,471	100	1.00
Manitou.....	2	8	.....	.....	.....	6	.....	11	.....	5	657	131	.76
Marquette.....	284	215	140	90	9	108	109	10	112	120	21,946	183	.85
Mason.....	44	37	52	51	2	53	62	71	.....	86	6,301	62	1.60
Mcosta.....	95	89	83	88	2	90	88	8	102	103	9,132	99	1.13
Menominee.....	22	19	20	20	20	32	.....	35	1	53	3,490	66	1.62
Midland.....	50	23	39	23	23	27	4	54	.....	43	4,765	111	.90
Missaukee.....	4	2	5	3	.....	7	.....	6	.....	2	606	308	.33
Monroe.....	249	310	308	285	26	311	329	5	333	396	30,111	83	1.22
Montcalm.....	177	192	202	156	47	203	178	41	213	214	20,815	85	1.17
Muskegon.....	180	166	157	162	15	177	138	5	118	203	10,375	96	1.16
Newaygo.....	56	88	87	78	.....	78	87	10	97	103	8,768	85	1.17
Oakland.....	266	301	330	325	14	339	314	25	339	304	38,692	125	.80

DEATHS, 1879.

According to the returns, 14,407 deaths occurred in Michigan during the year 1879. This is the largest number of deaths returned in one year since the establishment, in Michigan, of the act to provide for the registration of births, marriages, and deaths in 1867. In the year 1873 the next largest number of deaths was returned, being 14,258; yet, considering the results after corrections for omissions each year, according to the method usually adopted by us, the second greatest number of deaths appears to have occurred in 1872.

The average number of deaths during each of certain specified periods of time in 1879, including unknown month, is as follows:

PERIODS OF TIME.	Deaths as Returned.	Corrected as per Exhibit C, 4th line.
Per quarter.....	3,601.75	5,140.00
Per month.....	1,200.58	1,713.33
Per week.....	277.06	385.38
Per day.....	39.47	56.30

THE DEATH-RATE IN MICHIGAN.

In the tabular statement given below the "Inhabitants Represented by Deaths" are the inhabitants of the State, except of those townships from which no returns of deaths in 1879 were received. After corrections for omissions, the ratio of deaths to inhabitants is shown to be 1.56 in 100, or 15.6 for each 1,000 inhabitants. This death-rate, as an average death-rate for a State with a large and sparsely settled territory may not be considered much too small. Massachusetts, having a much larger population to a given territory than has Michigan, had, for an average death-rate for 30 years, 19.26 to every thousand of the population. The State of Connecticut, according to its Registration Report, had, for the year 1880, a death-rate of 16.7 in 1,000. Both of these States have a large population that is subjected to dangers to

DEATHS—BY QUARTERS OF THE YEAR.

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health pertaining to factory-life, which must have its influence on the death-rate in those States.

	Inhabitants in 1874 Represented by Deaths in 1879.	Deaths as Returned.	Deaths Corrected for Omissions in Enumerating.	PER CENT. OF DEATHS TO INHABITANTS.	
				Deaths as Returned.	Deaths Corrected for Omissions.
Total.....	1,318,164	14,407	20,583	1.09	1.56

Table I. gives a comparison of the number and per cent. of deaths in Michigan, by quarters of the year, as returned, and as corrected for omissions, for each of the years 1874-1879. As shown by the per cents calculated after corrections for omissions, with the exception of the third quarter, the deaths per quarter, for the year 1879, were quite evenly distributed. For the third quarter the number of deaths returned was 521 more than the average per quarter for the year, or, when corrected for omissions, 557 more than the average.

TABLE I.—Deaths in Michigan by Quarters of the Year, Exhibiting the Number and Per Cent. of Total as Returned and as Corrected for Omissions for each of the Years 1874 to 1879, inclusive.

TOTALS, AND MONTHS WITH WHICH QUARTERS END.		1874.		1875.		1876.		1877.		1878.		1879.	
		Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.	Num-ber.	Per Ct. of Total.
Totals.....		12,500	100.00	11,990	100.00	12,576	100.00	12,919	100.00	12,766	100.00	14,407	100.00
As Returned.	March.....	2,246	17.97	2,679	22.34	2,460	19.56	2,599	20.12	2,449	19.18	3,009	20.89
	June.....	3,039	24.31	2,838	23.63	2,803	22.29	2,829	21.90	2,822	22.10	3,159	21.93
	Sept.....	3,870	30.96	3,334	27.81	4,009	31.88	3,999	30.95	3,731	29.23	4,123	28.62
	Dec.....	3,299	26.39	3,073	25.62	3,273	26.02	3,436	26.60	3,740	29.30	4,075	28.28
	Unknown	46	.37	71	.59	31	.25	56	.43	24	.19	41	.28
Average.....		3,125.00	25.00	2,997.50	25.00	3,144.00	25.00	3,229.75	25.00	3,191.50	25.00	3,602	25.00
Totals.....		20,000	100.00	17,239	100.00	18,389	100.00	18,341	100.00	18,868	100.00	20,583	100.00
As Corrected for Omissions.	March..	4,298	21.34	4,409	25.30	4,153	22.58	4,227	23.06	4,217	22.35	4,933	23.97
	June....	5,281	26.29	4,815	24.96	4,364	23.73	4,259	23.22	4,468	23.68	4,793	23.23
	Sept....	5,963	29.68	4,621	26.78	5,661	30.78	5,495	29.96	5,340	28.30	5,703	27.71
	Dec....	4,512	22.46	3,573	22.40	4,180	22.73	4,304	23.47	4,817	25.53	5,113	24.84
	Unk.....	46	.23	71	.41	31	.17	56	.30	24	.13	41	.20
Average.....		5,023	25.00	4,323	25.00	4,597	25.00	4,585	25.00	4,717	25.00	5,146	25.00

* Including deaths in unknown month.

TABLE II.—Deaths in Michigan, by Months, Exhibiting, the Number and Per Cent. of Total Returned for each of the Years 1874 to 1879, inclusive, the months arranged in order by Number of Deaths, those having the Greatest first.

Order	1874.			1875.			1876.			1877.			1878.			1879.		
	Year and Months.	Num-ber.	Per Ct. of Total.	Year and Months.	Num-ber.	Per Ct. of Total.	Year and Months.	Num-ber.	Per Ct. of Total.	Year and Months.	Num-ber.	Per Ct. of Total.	Year and Months.	Num-ber.	Per Ct. of Total.	Year and Months.	Num-ber.	Per Ct. of Total.
1	Sept...	12,500	100.00	Year...	11,990	100.00	Year...	12,576	100.00	Year...	12,919	100.00	Year...	12,766	100.00	Year...	14,407	100.00
2	1 Sept...	1,517	12.16	Aug...	1,222	10.19	Aug...	1,507	11.98	Aug...	1,539	12.07	Aug...	1,371	10.74	Aug...	1,537	10.67
3	2 Aug...	1,388	11.10	Sept...	1,219	10.17	Sept...	1,453	11.32	Sept...	1,440	10.84	Sept...	1,369	10.72	Dec...	1,521	10.56
4	3 Oct...	1,211	9.69	Oct...	1,080	9.01	Dec...	1,153	9.17	Oct...	1,221	9.45	Sept...	1,313	10.52	Sept...	1,403	9.74
5	4 Dec...	1,120	8.96	Dec...	1,065	8.88	Oct...	1,131	8.99	Dec...	1,155	8.94	Oct...	1,190	9.32	Oct...	1,286	8.93
6	5 April...	1,102	8.81	Mar...	1,045	8.72	July...	1,079	8.58	Nov...	1,060	8.50	Nov...	1,181	9.25	Nov...	1,268	8.50
7	6 May...	1,071	8.57	May...	1,022	8.52	Nov...	989	7.86	July...	1,040	8.05	April...	1,029	8.06	July...	1,183	8.21
8	7 Nov...	968	7.74	April...	1,003	8.37	April...	974	7.78	Mar...	990	7.66	July...	1,017	7.97	April...	1,174	8.15
9	8 July...	965	7.73	Nov...	928	7.74	Mar...	975	7.75	April...	978	7.57	Mar...	929	7.28	Mar...	1,114	7.73
10	9 Mar...	913	7.35	Feb...	898	7.49	May...	970	7.71	May...	976	7.55	May...	923	7.23	May...	1,083	7.52
11	10 June...	866	6.93	July...	893	7.45	June...	855	6.81	June...	875	6.77	June...	870	6.82	Feb...	992	6.88
12	11 Feb...	672	5.39	June...	809	6.74	Feb...	890	6.56	Feb...	843	6.53	Feb...	789	6.18	Jan...	903	6.27
	12 Jan...	655	5.24	Jan...	736	6.14	Jan...	685	5.45	Jan...	766	5.93	Jan...	730	5.72	June...	902	6.26
	Unk...	46	.37	Unk...	71	.59	Unk...	31	.25	Unk...	56	.43	Unk...	24	.19	Unk...	41	.28
	AV.....	1,01,67	8.33	AV.....	999,17	8.33	AV.....	1,048,00	8.33	AV.....	1,076,58	8.33	AV.....	1,063,43	8.33	AV.....	1,200,58	8.33

Table II. gives the number of deaths and per cent. of deaths to the whole number as returned, by months arranged in order, those having the greatest number first. For the year 1879, August and December are the first two months in the table.

Exhibit D shows the order of months arranged according to returns of deaths corrected for omissions.

Table III. shows, by months, the number of males and females returned as having died in Michigan in 1879, the per cent. of the sexes, and the number of males to 100 females. January, September, and October are the months when there was the greatest excess of deaths among the males.

TABLE III.—Number and Per Cent. of Deaths of Males and of Females from all Causes, as Returned, by Months. (Unknown sex excluded.)

YEAR AND MONTHS, 1879.	DEATHS AS RETURNED, 1879.		PER CENT. OF EACH SEX TO TOTAL OF BOTH SEXES.				Males to 100 Fe- males.
	Males.	Fe- males.	Males.	Fe- males.	EXCESS OF THE SEXES.		
					Males.	Females.	
YEAR 1879	7,522	6,848	52.35	47.65	4.70	-----	109.84
January	495	404	55.06	44.94	10.12	-----	122.52
February.....	513	477	51.82	48.18	3.64	-----	107.55
March	577	536	51.84	48.16	3.68	-----	107.65
April.....	603	569	51.45	48.55	2.90	-----	105.98
May.....	564	515	52.27	47.73	4.54	-----	109.51
June.....	468	430	52.12	47.88	4.24	-----	108.84
July	612	567	51.91	48.09	3.82	-----	107.94
August.....	778	753	50.82	49.18	1.64	-----	103.32
September.....	761	639	54.36	45.64	8.72	-----	119.09
October.....	692	591	53.94	46.06	7.88	-----	117.09
November.....	662	604	52.29	47.71	4.58	-----	109.60
December.....	771	748	50.76	49.24	1.52	-----	103.07
Unknown.....	26	15	63.41	36.59	26.82	-----	173.33

In Exhibit A the deaths are equalized to months of uniform length. In the study of the relation of the months to the number of deaths no allowance is required to be made for months of different length.

EXHIBIT A.—*By Sex, the Number of Deaths Returned as having occurred in Michigan during the Year 1879, by Months Equalized to 30.44 days each;—Number of Deaths in each Month; Per Cent. of Deaths in each Month to Total Deaths during the Year; and Per Cent. and Excess of Per Cent. of Deaths of each Sex to Total of both Sexes.*

YEAR AND MONTHS, 1879.	NUMBER OF DEATHS, AS EQUALIZED, 1879.				PER CT. OF DEATHS IN EACH MONTH TO TOTAL DURING THE YEAR.				PER CT. OF EACH SEX TO TOTAL OF BOTH SEXES, UNKNOWN SEX EX- CLUDED.			
	Total.	Males.	Fe- males.	Unk.	Total.	Males.	Fe- males.	Unk.	Males.	Fe- males.	EXCESS.	
											Males.	Fe- males.
YEAR 1879..	14,407	7,523	6,847	37	100.00	100.00	100.00	100.00	52.35	47.65	4.70	-----
January ...	887	486	397	4	6.16	6.46	5.80	10.81	55.04	44.96	10.08	-----
February ..	1,078	537	519	2	7.48	7.40	7.58	5.41	51.77	48.23	3.54	-----
March.....	1,094	567	528	1	7.59	7.54	7.63	2.70	51.88	48.12	3.76	-----
April.....	1,191	612	577	2	8.27	8.14	8.43	5.41	51.47	48.53	2.94	-----
May.....	1,063	554	505	4	7.38	7.32	7.38	10.81	52.31	47.69	4.62	-----
June.....	915	475	436	4	6.35	6.31	6.37	10.81	52.14	47.86	4.28	-----
July.....	1,162	601	557	4	8.07	7.99	8.13	10.81	51.90	48.10	3.80	-----
August.....	1,509	764	739	6	10.47	10.16	10.79	16.22	50.83	49.17	1.66	-----
September..	1,424	772	649	3	9.88	10.28	9.48	8.11	54.33	45.67	8.66	-----
October....	1,283	680	580	3	8.77	9.04	8.47	8.11	53.97	46.03	7.94	-----
November..	1,287	672	613	2	8.93	8.93	8.95	5.40	52.30	47.70	4.60	-----
December..	1,493	757	734	2	10.36	10.06	10.72	5.40	50.77	49.23	1.54	-----
Unknown..	41	26	15	-----	.29	.35	.23	-----	63.41	36.59	26.83	-----
Average ..*	1,197.17	624.75	569.23	3.08	8.31	8.30	8.32	8.33	-----	-----	-----	-----

* Unknown month excluded.

Exhibit B shows the relative order of the different months with regard to the number of deaths returned; also, to the same corrected for omissions. The order, as based on the U. S. Census of 1870, and upon returns by supervisors, is given for comparison, and a similar arrangement with regard to deaths in Massachusetts and Rhode Island.

EXHIBIT B.—*Months arranged in Order by Number of Deaths,—those having the greatest Number first,—in Michigan for the Census Year ending June 1, 1870, by the U. S. Census and by the State Registration Returns, for each of the Years 1876 to 1879, inclusive, as per Registration Returns, and for each of the Years 1877 to 1879, inclusive; Corrected for Omissions in Enumerating; in Massachusetts for the Years 1877, 1878, and 1879, also, in Rhode Island for the Years 1877, 1878, and 1879.*

ORDER.	MICHIGAN FOR CENSUS YEAR ENDING JUNE 1, 1870.		MICHIGAN, AS PER REGISTRATION RETURNS, INCLUDING STILL-BIRTHS.				MICHIGAN, CORRECTED FOR OMISSIONS IN ENUMERATION, INCLUDING STILL-BIRTHS.			MASSACHUSETTS, INCLUDING STILL-BIRTHS.			RHODE ISLAND, EXCLUDING STILL-BIRTHS.		
	Returned by Census Marshals.	Registration Returns.	1876.	1877.	1878.	1879.	1877.	1878.	1879.	1877.	1878.	1879.	1877.	1878.	1879.
1	Mar.	Sept.	Aug.	Aug.	Aug.	Aug.	Aug.	Aug.	Aug.	Aug.	Aug.	Jan.	Sept.	Dec.	Jan.
2	May.	Aug.	Sept.	Sept.	Dec.	Dec.	Sept.	Sept.	Sept.	Sept.	July.	Aug.	Aug.	Aug.	Aug.
3	Aug.	Oct.	Dec.	Oct.	Sept.	Sept.	Oct.	Dec.	Dec.	July.	Dec.	Mar.	Oct.	July.	Dec.
4	Sept.	Dec.	Oct.	Dec.	Oct.	Oct.	Mar.	Apr.	Apr.	Mar.	Sept.	Apr.	July.	Jan.	Oct.
5	Apr.	Mar.	July.	Nov.	Nov.	Nov.	Apr.	Oct.	Mar.	Oct.	Oct.	July.	Dec.	Mar.	Nov.
6	Feb.	May.	Nov.	July.	Apr.	July.	July.	Mar.	July.	Jan.	Mar.	Feb.	Nov.	Nov.	July.
7	Oct.	July.	Apr.	Mar.	July.	Apr.	May.	Nov.	Oct.	April.	Jan.	Dec.	Mar.	Feb.	Mar.
8	Dec.	Nov.	Mar.	Apr.	Mar.	Mar.	Dec.	July.	May.	Nov.	Nov.	May.	May.	Apr.	Apr.
9	Jan.	April.	May.	May.	May.	May.	Feb.	May.	Feb.	Dec.	Apr.	Sept.	Jan.	Sept.	Sept.
10	July.	June.	J'ne.	J'ne.	J'ne.	Feb.	Nov.	Feb.	Nov.	May.	May.	Oct.	Apr.	Oct.	Feb.
11	Nov.	Feb.	Feb.	Feb.	Feb.	Jan.	Jan.	J'ne.	Jan.	Feb.	Feb.	Nov.	J'ne.	J'ne.	May.
12	June.	Jan.	Jan.	Jan.	Jan.	J'ne.	J'ne.	Jan.	J'ne.	J'ne.	J'ne.	J'ne.	Feb.	May.	J'ne.

DEATHS BY MONTHS, CORRECTED FOR OMISSIONS IN THE ENUMERATION.

It is assumed that it is possible to estimate the approximate number of deaths that have occurred in each month of the year. Evidence seems to prove that omissions bear a direct relation to the time which elapses between the occurrence of the deaths and their enumeration. The method adopted for obtaining this correction has been explained in previous reports. Applying this method to deaths returned for 1879, it was found that the average per cent. to be added to the deaths returned to make them equal the number which probably occurred was 44.88. But the omissions are in proportion to the time between the deaths and their being placed on record, therefore the per cent. differs for each month. This per cent. is stated in the second line of Exhibit C, page 110, and of Exhibit E, page 113.

EXHIBIT C.—Deaths in Michigan during the Year 1879, as Returned, as Corrected for Omissions in Enumerating, the same Equalized for Increase of Population during the Year covered by the Returns, and the Deaths as thus Corrected and Equalized for the several Months, Equalized for Months of a uniform length of 30.44 days; also, indicating some of the steps by which these results have been reached.

	TOTAL ^a	MONTHS, 1879.											
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Deaths as returned by Registration Officers.....	14,368	903	992	1,114	1,174	1,083	902	1,183	1,337	1,403	1,286	1,508	1,521
Per cent. of deaths to be added for correction for time elapsing before enumeration.....	68.50	64.22	59.94	53.66	51.38	47.10	42.82	38.54	34.26	29.98	25.70	21.42	21.42
Number of deaths to be added for above correction.....	6,176	619	637	663	653	566	425	507	592	431	386	320	328
Deaths, if enumerated in months of occurrence.....	20,542	1,522	1,629	1,782	1,827	1,639	1,327	1,690	2,129	1,884	1,672	1,824	1,847
Per cent. of deaths to be added to equalize them to population at close of year.....	4.21	3.86	3.51	3.16	2.81	2.46	2.11	1.76	1.41	1.06	.71	.35	.35
Deaths to be added to equalize them to population at close of year.....	462	64	63	63	58	46	33	36	37	27	18	11	6
Deaths, as corrected, equalized to population at close of year.....	21,004	1,586	1,692	1,845	1,885	1,685	1,360	1,726	2,166	1,911	1,690	1,605	1,853
Days and hundredths by which the months should be increased or diminished to equalize them to months of uniform length.....	—56	+2.44	—56	+44	—56	+44	—56	—56	—56	+44	—56	+44	—56
Number by which the deaths should be increased or diminished to equalize them to months of uniform length.....	+21	—29	+147	—33	+28	—30	+20	—31	—30	+28	—31	+24	—33
Deaths, corrected and equalized, equalized to months of uniform length..	21,025	1,557	1,839	1,912	1,913	1,655	1,380	1,695	2,127	1,939	1,639	1,629	1,820

^a Excluding 41 in unknown month.

The last line in Exhibit C probably supplies better data than any other line for comparisons of the several months with each other, for it shows the number of deaths for each month in a population equaling that at the close of the year.

EXHIBIT D.—*Deaths during the Years 1876 to 1879, inclusive, as Corrected for Omissions in the Enumeration, Exhibiting the Number and Per Cent. of Total, by Months arranged in Order by Number, Months having the greatest number first.*

ORDER.	1876.			1877.			1878.			1879.		
	Months.	Num-ber.	Per Ct. of Total.	Months.	Num-ber.	Per Ct. of Total.	Months.	Num-ber.	Per Ct. of Total.	Months.	Num-ber.	Per Ct. of Total.
	Total...	18,389	100.00	Total...	18,341	100.00	Total...	18,866	100.00	Total...	20,538	100.00
1	Aug.....	2,134	11.60	Aug....	2,148	11.71	Aug.....	1,968	10.43	Aug.....	2,129	10.34
2	Sept....	1,949	10.60	Sept....	1,970	10.20	Sept....	1,863	9.87	Sept....	1,884	9.15
3	Mar.....	1,606	8.73	Oct....	1,580	8.61	Dec.....	1,700	9.01	Dec.....	1,847	8.97
4	July.....	1,578	8.58	Mar....	1,572	8.57	Apr.....	1,676	8.88	Apr.....	1,827	8.88
5	Apr.....	1,566	8.52	Apr....	1,512	8.24	Oct.....	1,593	8.44	Mar.....	1,782	8.66
6	May.....	1,568	8.20	July...	1,477	8.06	Mar.....	1,560	8.27	July....	1,690	8.21
7	Oct.....	1,497	8.14	May....	1,469	8.00	Nov.....	1,524	8.08	Oct.....	1,672	8.12
8	Dec.....	1,420	7.72	Dec....	1,397	7.62	July....	1,509	8.00	May....	1,639	7.96
9	Feb.....	1,355	7.37	Feb....	1,374	7.49	May....	1,459	7.73	Feb.....	1,629	7.92
10	June....	1,290	7.01	Nov....	1,327	7.24	Feb.....	1,362	7.22	Nov.....	1,504	7.74
11	Nov.....	1,263	6.87	Jan....	1,281	6.98	June....	1,333	7.07	Jan.....	1,522	7.40
12	Jan.....	1,192	6.48	June...	1,279	6.97	Jan.....	1,295	6.86	June....	1,327	6.45
	Unk.....	31	.17	Unk....	56	.31	Unk.....	24	.13	Unk.....	41	.20
	Av.....	1,532	8.33	Av.....	1,528	8.33	Av.....	1,672	8.33	Av.....	1,715	8.33

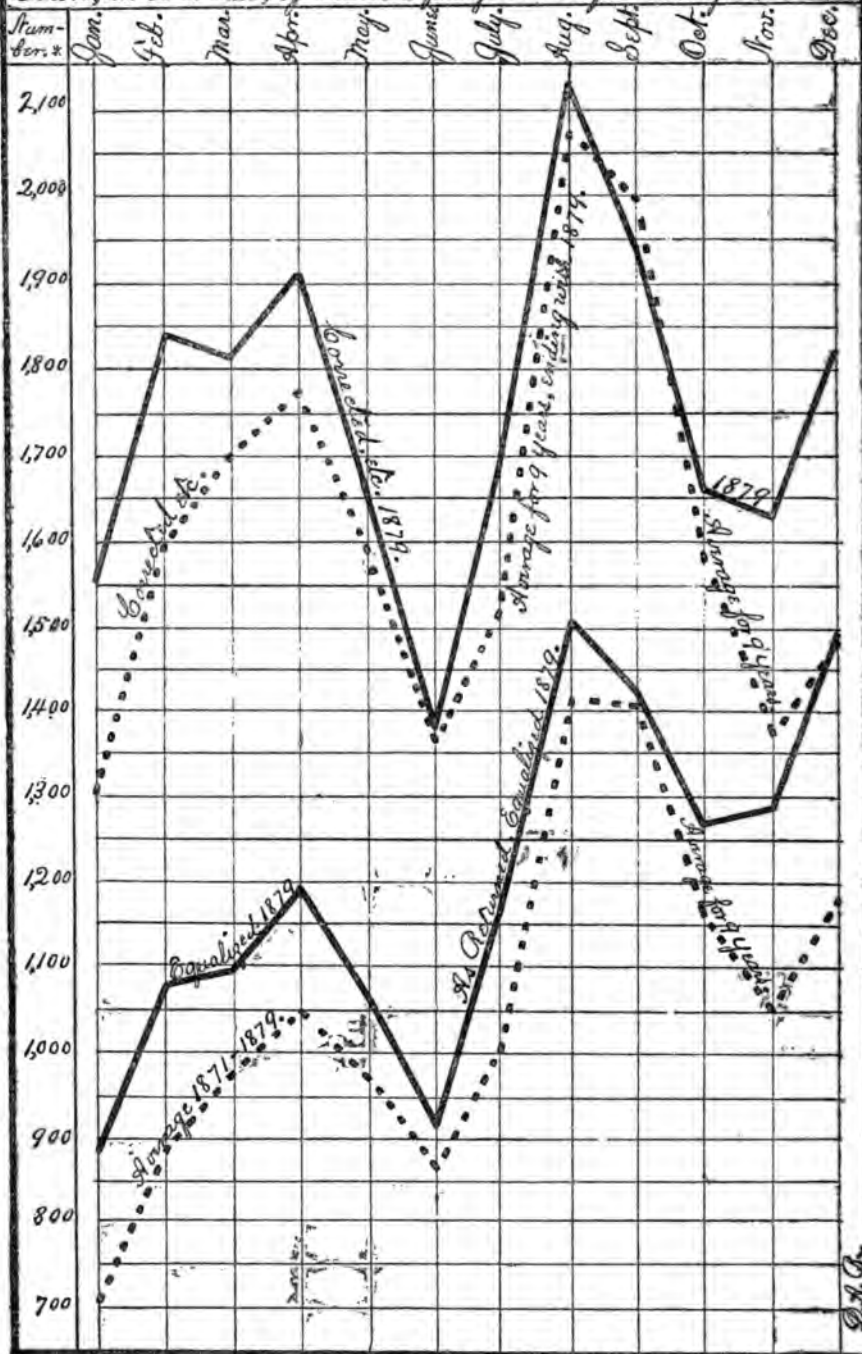
* Including deaths in unknown month.

Exhibit D may be compared with Table II., page 106, in which the deaths are enumerated as they were returned.

Diagram No. 3, following, exhibits graphically the relative proportion of deaths in each month, as first returned and as corrected for omissions in the enumeration, for 1879. Also, the average for each month of 1871-1879.

Diagram No. 3.

Deaths in Michigan in 1874, and Average for 9 years ending with 1879 as Returned, as Corrected for Omissions and Equalized for Increase of Population; in each case, by months Equalized to uniform length.



* Scale = 224 to the inch.

Designed by Henry B. Baker.

EXHIBIT E.—Deaths in Michigan during the Year 1879, as Returned, as Corrected for Omissions in Enumerating, and as thus Corrected, Equalized to Months of uniform length of 30.44 days each.

	TOTAL.	MONTHS, 1879.											
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Deaths as returned by Registration Office.	14,368	903	993	1,114	1,174	1,083	908	1,183	1,837	1,403	1,286	1,363	1,521
Per cent. of deaths to be added for correction for time elapsing before enumeration	68.50	64.22	59.94	55.66	51.33	47.10	42.82	38.54	34.26	29.98	25.70	21.42	17.14
Number of deaths to be added for above correction.	6,176	619	637	638	633	556	425	507	592	481	358	326	336
Deaths, if enumerated in month of occurrence.	20,543	1,522	1,629	1,752	1,827	1,639	1,327	1,690	2,429	1,884	1,672	1,684	1,847
Days and hundredths by which the months should be increased or diminished to equalize them to months of uniform length.	—56	+2.44	—56	+44	—56	—56	+44	—56	—56	+44	—56	+44	—56
Number by which the deaths should be increased or diminished to equalize them to months of uniform length.	+18	—27	+143	—32	+27	—30	+19	—31	—38	+26	—30	+23	—33
Deaths, corrected and equalized to months of uniform length.	20,560	1,495	1,771	1,750	1,854	1,609	1,316	1,639	2,091	1,912	1,642	1,617	1,814

* Excluding 41 in unknown month.

AGES OF PERSONS WHO DIED IN MICHIGAN IN 1879.

Table IV. exhibits the number of deaths by periods of age, and by sex, were returned for the year 1879. It also shows the per cent. of deaths at age to total at all ages, and the excess, in per cent. and number, of death each age, relative to the two sexes. According to this table 24.68 per cent all the deaths were of children under one year of age, the largest portion occurring among the males.

TABLE IV.—*Exhibiting, by Sex, and by Age in Periods of Years, the Number and Proportion of Persons Returned as having Died in Michigan during Year 1879; also the Excess of Persons of each Sex.*

AGES IN YEARS AND PERIODS.	NUMBER OF DEATHS, 1879.				PER CT. OF DEATHS AT EACH AGE TO TOTAL AT ALL AGES.			PER CT. OF EACH SEX TO TOTAL OF BOTH SEXES.				EXCESS OF THE SEXES BY NUMBER.	
	Total.	Males.	Fe- males.	Unk.	Total.	Males.	Fe- males.	Males.	Fe- males.	Excess.		Males.	Fe- males.
										Males.	Fe- males.		
All Ages...	14,407	7,522	6,848	37	100.00	100.00	100.00	52.85	47.65	4.70	-----	674	-----
Under 1....	3,555	2,015	1,507	33	24.68	26.79	22.01	57.21	42.79	14.42	-----	508	-----
1 to 2.....	552	434	417	-----	5.91	5.77	6.10	50.94	49.06	1.88	-----	16	-----
2 to 3.....	512	285	257	-----	3.76	3.79	3.75	52.58	47.42	5.16	-----	29	-----
3 to 4.....	328	199	186	-----	2.67	2.65	2.72	51.69	48.31	3.38	-----	13	-----
4 to 5.....	339	178	181	-----	2.49	2.37	2.64	49.53	50.42	-----	.81	-----	3
Under 5....	5,693	3,111	2,549	33	39.52	41.36	37.22	54.96	45.04	9.92	-----	562	-----
5 to 10.....	1,025	523	502	-----	7.11	6.95	7.33	51.02	48.98	2.04	-----	21	-----
10 to 15.....	549	259	290	-----	3.81	3.44	4.23	47.18	52.82	-----	5.64	-----	31
15 to 20.....	558	220	338	-----	3.87	2.92	4.94	39.43	60.57	-----	21.14	-----	118
20 to 25.....	641	281	300	-----	4.45	3.74	5.26	43.84	56.16	-----	12.32	-----	79
25 to 30.....	545	217	328	-----	3.78	2.88	4.79	30.82	60.18	-----	20.36	-----	111
30 to 35.....	470	211	259	-----	3.26	2.81	3.78	44.89	55.11	-----	10.22	-----	48
35 to 40.....	520	222	298	-----	3.61	2.95	4.35	42.69	57.31	-----	14.62	-----	76
40 to 45.....	413	207	206	-----	2.87	2.75	3.01	50.12	49.88	.24	-----	1	-----
45 to 50.....	407	225	182	-----	2.83	2.99	2.66	55.25	44.72	10.56	-----	43	-----
50 to 55.....	394	219	175	-----	2.73	2.91	2.56	55.58	44.42	11.16	-----	44	-----
55 to 60.....	437	247	190	-----	3.03	3.28	2.77	56.52	43.48	13.04	-----	57	-----
60 to 65.....	471	276	195	-----	3.27	3.67	2.85	53.60	41.40	17.20	-----	81	-----
65 to 70.....	576	347	229	-----	4.00	4.61	3.34	60.24	39.76	20.48	-----	118	-----
70 to 75.....	483	276	207	-----	3.35	3.67	3.02	57.14	42.86	14.28	-----	69	-----
75 to 80.....	462	249	213	-----	3.21	3.31	3.11	53.90	46.10	7.80	-----	36	-----
80 to 85.....	328	190	133	-----	2.28	2.53	2.02	57.93	42.07	15.86	-----	52	-----
85 to 90.....	179	102	70	-----	1.24	1.36	1.02	56.98	39.11	17.87	-----	32	-----
90 to 95.....	54	29	25	-----	.37	1.39	.37	53.70	40.30	7.40	-----	4	-----
95 to 100....	21	6	15	-----	.15	.08	.22	28.57	71.43	-----	42.86	-----	9
100 and over	8	5	3	-----	.06	.07	.04	62.50	37.50	25.00	-----	2	-----
Unk. Ages.	173	93	76	4	1.20	1.24	1.11	55.03	44.97	10.08	-----	17	-----

EXHIBIT F.—Decedents in Michigan in 1879, by Sex, and Excess of the Sexes, by Age in Years.

AGE IN YEARS.	DECEDENTS, 1879.				EXCESS.		AGE IN YEARS.	DECEDENTS, 1879.				EXCESS.	
	Total.	Males.	Fe- males.	Unk.	Males.	Fe- males.		Total.	Males.	Fe- males.	Unk.	Males.	Fe- males.
All Ages...	14,407	7,522	6,848	37	674		35	123	54	69			15
							36	110	50	60			10
Under 1....	3,555	2,015	1,507	33	508		37	91	36	55			19
1.....	852	434	418		16		38	100	37	63			26
2.....	542	285	257		28		39	96	45	51			6
3.....	285	199	186		13		40	110	52	58			6
4.....	359	178	181			3	41	62	33	29		4	
5.....	230	128	111		17		42	87	50	37		13	
6.....	262	141	121		20		43	98	45	53			8
7.....	208	104	104				44	56	27	29			2
8.....	169	68	81		7		45	111	54	57			3
9.....	147	62	85			23	46	58	34	24		10	
10.....	131	67	64		3		47	62	30	32			2
11.....	112	51	61			10	48	107	66	41		25	
12.....	122	57	65			8	49	69	41	28		13	
13.....	106	57	49		8		50	98	55	43		12	
14.....	78	27	51			24	51	56	32	24		8	
15.....	83	31	52			21	52	93	44	49			5
16.....	96	39	57			18	53	65	35	30		5	
17.....	129	43	86			43	54	82	53	29		24	
18.....	117	42	75			33	55	80	48	32		16	
19.....	133	65	68			4	56	90	51	39		12	
20.....	132	58	74			16	57	92	52	40		12	
21.....	129	54	75			21	58	87	47	40		7	
22.....	133	64	69			5	59	88	49	39		10	
23.....	109	49	60			11	60	123	76	47		29	
24.....	138	56	82			26	61	68	37	31		6	
25.....	122	56	66			10	62	76	45	31		14	
26.....	101	36	65			29	63	86	46	40		6	
27.....	113	49	64			15	64	118	72	46		26	
28.....	116	45	71			26	65	130	80	50		30	
29.....	93	31	62			31	66	88	52	36		16	
30.....	110	54	52		6		67	114	70	44		26	
31.....	71	27	44			17	68	129	75	54		21	
32.....	116	53	63			10	69	115	70	45		25	
33.....	90	37	53			16	70	105	66	39		27	
34.....	83	36	47			11	71	78	38	40			2

EXHIBIT F.—CONTINUED.—*Deaths by Ages in Michigan in 1879.*

AGE IN YEARS.	DECEDENTS, 1879.				EXCESS.		AGE IN YEARS.	DECEDENTS, 1879.				EXCESS.	
	Total.	Males.	Fe- males.	Unk.	Males.	Fe- males.		Total.	Males.	Fe- males.	Unk.	Males.	Fe- males.
72.....	97	58	39	.....	19	.....	89.....	22	15	7	.....	8	.....
73.....	111	57	54	.....	3	.....	90.....	17	8	9	.....	1	.....
74.....	92	57	35	.....	23	.....	91.....	13	8	5	.....	3	.....
75.....	103	67	36	.....	31	.....	92.....	11	5	6	.....	1	.....
76.....	97	53	44	.....	9	.....	93.....	8	4	4	.....	.....	.....
77.....	73	29	44	.....	.....	15	94.....	5	4	1	.....	3	.....
78.....	89	45	44	.....	1	.....	95.....	3	.....	3	.....	3	.....
79.....	100	55	45	.....	10	.....	96.....	7	2	5	.....	3	.....
80.....	83	49	33	.....	16	.....	97.....	6	2	4	.....	2	.....
81.....	56	35	21	.....	14	.....	98.....	3	1	2	.....	1	.....
82.....	72	40	32	.....	8	.....	99.....	2	1	1	.....	.....	.....
83.....	55	35	20	.....	15	.....	100.....	4	3	1	.....	2	.....
84.....	63	31	32	.....	.....	1	103.....	1	1	.....	.....	1	.....
85.....	50	31	19	.....	12	.....	105.....	1	1	.....	.....	1	.....
86.....	44	32	12	.....	20	.....	106.....	1	.....	1	.....	.....	1
87.....	29	11	18	.....	.....	7	107.....	1	.....	1	.....	.....	1
88.....	34	20	14	.....	6	.....	Unknown.	173	93	76	4	17	.....

AGES OF PERSONS WHO DIED, BY MONTHS OF DEATH.

Deaths at different periods of life in the several months of the year 1879 may be studied in Exhibit G. At no period of equal length is life so precarious as during the first five years. According to this exhibit it is seen that more deaths occurred under five years of age, during the year and during each month in the year, than for any like period of life. Of this number of deaths more than half occurred among those under one year of age. Among children under five years of age, including those under one year of age, the greatest number of deaths occurred in the months of August, September, and July. The great number of deaths, at this period, when compared with the number at all ages, shows the comparative destructiveness of infant life in the summer.

EXHIBIT C.—The Relation of the Deaths at Different Periods of Age to Deaths at All Ages, by Months; and for the same Periods of Age, the Relation of the Deaths in each Month to the Deaths in the Year 1879, according to the Returns.

DEATHS BY AGES IN PERIODS OF YEARS.	YEAR, 1879.*	MONTHS, 1879.											
		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
All Ages.....	14,366	903	923	1,114	1,174	1,083	902	1,193	1,337	1,403	1,366	1,368	1,521
Under 1.....	3,560	187	244	310	283	248	218	346	468	360	302	249	333
{ Number.....													
{ Per Cent. of All Ages.....	24.71	20.71	24.60	27.83	24.26	22.90	24.17	29.25	30.45	25.66	22.48	19.64	21.89
Under 5.....	100.00	5.27	6.87	8.73	8.03	6.99	6.14	9.76	13.18	10.14	8.51	7.01	9.38
{ Number.....	5,683	327	381	464	431	381	344	523	726	606	498	446	566
{ Per Cent. of All Ages.....	39.56	36.21	38.41	41.65	36.71	33.19	38.14	44.21	47.23	43.19	37.95	35.17	37.21
{ Per Cent. of Deaths, 1879.....	100.00	6.75	6.70	8.16	7.53	6.70	6.05	9.20	12.77	10.68	8.69	7.85	9.96
5 to 10.....	1,023	67	50	61	69	58	54	64	101	108	131	129	131
{ Number.....													
{ Per Cent. of All Ages.....	7.12	7.42	5.04	5.48	5.88	5.36	5.99	5.41	6.57	7.70	10.19	10.17	8.61
{ Per Cent. of Deaths, 1879.....	100.00	6.55	4.90	5.96	6.74	5.67	6.28	6.26	9.87	10.56	12.61	12.61	12.81
10 to 20.....	1,100	64	69	82	83	86	68	87	90	130	123	94	124
{ Number.....													
{ Per Cent. of All Ages.....	7.66	7.09	6.96	7.36	7.07	7.04	7.54	7.35	6.88	9.27	9.56	7.41	8.15
{ Per Cent. of Deaths, 1879.....	100.00	6.82	6.37	7.45	7.53	7.82	6.18	7.91	8.18	11.62	11.18	8.55	11.37
20 to 50.....	2,993	198	230	221	277	232	216	255	273	250	249	279	313
{ Number.....													
{ Per Cent. of All Ages.....	20.83	21.93	23.19	19.84	23.69	21.43	23.95	21.66	17.76	17.82	19.36	22.00	20.68
{ Per Cent. of Deaths, 1879.....	100.00	6.62	7.63	7.38	9.35	7.75	7.22	8.52	9.12	8.35	8.32	9.32	10.46
50 and over.....	3,408	240	256	275	300	314	269	239	329	284	279	306	365
{ Number.....													
{ Per Cent. of All Ages.....	23.71	26.58	25.81	24.69	25.53	26.99	23.17	20.20	21.41	20.96	21.70	24.13	24.00
{ Per Cent. of Deaths, 1879.....	100.00	7.05	7.52	8.07	8.81	9.23	6.14	7.02	9.66	8.63	8.19	8.86	10.73
Unknown Ages.....	161	7	6	11	14	12	11	15	18	15	16	14	24
{ Number.....													
{ Per Cent. of All Ages.....	1.12	.78	.60	.92	1.19	1.11	1.22	1.27	1.17	1.07	1.24	1.10	1.45
{ Per Cent. of Deaths, 1879.....	100.00	4.35	3.73	6.83	8.70	7.45	6.83	9.52	11.18	9.32	9.94	8.70	13.66

* Excluding unknown month.

TABLE V.—*Exhibiting, by Sex and by Age in Periods of Years, the Number of Persons Returned as having Died in Michigan during the Year, and in each Month of the Year 1879.*

AGES IN PERIODS OF YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.												Unk.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
All Ages.....	Total.....	14,407	903	992	1114	1174	1083	902	1183	1537	1403	1286	1268	1521	41
	Males.....	7,522	495	513	577	603	564	468	612	778	761	692	662	771	26
	Females.....	6,848	404	477	536	569	515	430	567	753	639	591	604	748	15
	Unknown.....	37	4	2	1	2	4	4	4	6	3	3	2	2	---
All Under 1.....	Total.....	3,555	187	244	310	285	248	218	346	468	360	302	249	333	5
	Males.....	2,015	113	138	188	156	140	115	189	249	227	179	130	189	2
	Females.....	1,507	70	104	121	127	105	100	153	214	131	120	117	142	3
	Unknown.....	33	4	2	1	2	3	3	4	5	2	3	2	2	---
All Under 5.....	Total.....	5,693	327	381	464	431	381	344	523	726	604	488	446	566	10
	Males.....	3,111	187	209	270	236	207	170	274	377	302	263	240	310	6
	Females.....	2,549	136	170	193	193	171	171	245	344	242	222	204	254	4
	Unknown.....	33	4	2	1	2	3	3	4	5	2	3	2	2	---
5 to 10.....	Total.....	1,025	67	50	61	69	58	54	64	101	108	131	129	131	2
	Males.....	523	35	22	29	32	33	29	33	52	60	73	64	59	2
	Females.....	502	32	28	32	37	25	25	31	49	48	58	65	72	---
10 to 15.....	Total.....	549	36	26	35	42	39	38	38	48	61	69	48	66	3
	Males.....	250	13	12	13	19	21	24	22	20	26	34	21	31	3
	Females.....	290	23	14	22	23	18	14	16	28	35	35	27	35	---
15 to 20.....	Total.....	558	28	43	47	41	47	30	49	42	69	54	46	58	4
	Males.....	220	11	20	15	17	19	13	24	15	30	14	16	25	1
	Females.....	338	17	23	32	24	28	17	25	27	39	40	30	33	3
20 to 25.....	Total.....	641	33	44	53	55	37	58	55	54	63	45	74	68	2
	Males.....	281	22	19	21	26	14	25	23	22	28	21	33	27	---
	Females.....	360	11	25	32	29	23	33	32	32	35	24	41	41	2
25 to 30.....	Total.....	545	27	39	30	51	49	38	50	52	53	48	54	53	1
	Males.....	217	12	14	11	18	19	14	20	22	23	19	24	20	1
	Females.....	328	15	25	19	33	30	24	30	30	30	29	30	33	---
30 to 35.....	Total.....	470	41	31	35	41	36	28	46	33	34	46	44	55	---
	Males.....	211	18	11	17	18	15	13	24	17	12	20	20	26	---
	Females.....	259	23	20	18	23	21	15	22	16	22	26	24	29	---
35 to 40.....	Total.....	520	42	35	40	42	44	36	47	50	38	46	40	57	---
	Males.....	222	21	20	17	16	20	16	22	18	14	20	16	22	---
	Females.....	298	21	18	23	26	24	20	25	32	24	26	24	35	---
40 to 45.....	Total.....	413	29	43	30	44	33	27	23	43	28	34	29	50	---
	Males.....	207	19	18	15	24	19	13	13	22	10	11	17	26	---
	Females.....	206	10	25	15	20	14	14	10	21	18	23	12	24	---

TABLE V.—*Exhibiting, by Sex and by Age in Periods of Years, the Number of Persons Returned as having Died in Michigan during the Year, and in each Month of the Year 1879.*

AGES IN PERIODS OF YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.												Unk.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
All Ages.....	Total.....	14,407	903	992	1114	1174	1083	902	1183	1537	1403	1286	1268	1521	41
	Males.....	7,522	495	513	577	603	564	468	612	778	761	692	682	771	26
	Females.....	6,848	404	477	536	569	516	430	567	753	639	591	604	748	15
	Unknown.....	37	4	2	1	2	4	4	4	6	3	3	2	2	---
All Under 1.....	Total.....	3,555	187	244	310	285	248	218	346	468	360	302	249	333	5
	Males.....	2,015	113	138	188	156	140	115	189	249	227	179	130	189	2
	Females.....	1,507	70	104	121	127	105	100	153	214	131	120	117	142	3
	Unknown.....	33	4	2	1	2	3	3	4	5	2	3	2	2	---
All Under 5.....	Total.....	5,693	327	381	464	431	381	344	523	726	606	488	446	566	10
	Males.....	3,111	187	209	270	236	207	170	274	377	362	263	240	310	6
	Females.....	2,549	136	170	193	193	171	171	245	344	242	222	204	254	4
	Unknown.....	33	4	2	1	2	3	3	4	5	2	3	2	2	---
5 to 10.....	Total.....	1,025	67	50	61	69	58	54	64	101	108	131	129	131	2
	Males.....	523	35	22	29	32	33	29	33	52	60	73	64	59	2
	Females.....	502	32	28	32	37	25	25	31	49	48	58	65	72	---
10 to 15.....	Total.....	549	36	26	35	42	39	38	38	48	61	69	48	66	3
	Males.....	259	13	12	13	19	21	24	22	20	26	34	21	31	3
	Females.....	290	23	14	22	23	18	14	16	28	35	35	27	35	---
15 to 20.....	Total.....	558	28	43	47	41	47	30	49	42	69	54	46	58	4
	Males.....	220	11	20	15	17	19	13	24	15	30	14	16	25	1
	Females.....	338	17	23	32	24	28	17	25	27	39	40	30	33	3
20 to 25.....	Total.....	641	33	44	53	55	37	58	55	54	63	45	74	68	2
	Males.....	281	22	19	21	26	14	25	23	22	28	21	33	27	---
	Females.....	360	11	25	32	29	23	33	32	32	35	24	41	41	2
25 to 30.....	Total.....	545	27	39	30	51	49	38	50	52	53	48	54	53	1
	Males.....	217	12	14	11	18	19	14	20	22	23	19	24	20	1
	Females.....	328	15	25	19	33	30	24	30	30	30	29	30	33	---
30 to 35.....	Total.....	470	41	31	35	41	36	28	46	33	34	46	44	55	---
	Males.....	211	18	11	17	18	15	13	24	17	12	20	20	26	---
	Females.....	259	23	20	18	23	21	15	22	16	22	26	24	29	---
35 to 40.....	Total.....	520	42	35	40	42	44	36	47	50	38	46	40	57	---
	Males.....	222	21	20	17	16	20	16	22	18	14	20	16	22	---
	Females.....	298	21	18	23	26	24	20	25	32	24	26	24	35	---
40 to 45.....	Total.....	413	29	43	30	44	33	27	23	43	28	34	29	50	---
	Males.....	207	19	18	15	24	19	13	13	22	10	11	17	26	---
	Females.....	206	10	25	15	20	14	14	10	21	18	23	12	24	---

TABLE V.—CONTINUED.—Deaths by Periods of Age, by Sex, by Months.

AGES IN PERIODS OF YEARS.		Sex.	YEAR, 1879.	MONTHS, 1879.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
45 to 50	Total	407	26	35	33	44	33	29	34	41	34	30	38	30	---
	Males	225	15	23	15	19	21	18	22	14	16	18	24	20	---
	Females	182	11	12	18	25	12	11	12	27	18	12	14	10	---
50 to 55	Total	394	27	27	30	27	34	27	29	40	48	30	34	41	---
	Males	219	13	14	10	15	22	16	17	23	32	17	17	23	---
	Females	175	14	13	20	12	12	11	12	17	16	13	17	18	---
55 to 60	Total	437	28	25	25	44	47	24	33	49	38	33	32	59	---
	Males	247	14	15	14	24	22	13	14	33	20	23	21	34	---
	Females	190	14	10	11	20	25	11	19	16	18	10	11	25	---
60 to 65	Total	471	37	27	43	43	49	23	32	41	36	45	46	48	1
	Males	276	27	15	18	21	23	17	19	23	24	34	30	24	1
	Females	195	10	12	25	22	26	6	13	18	12	11	16	24	---
65 to 70	Total	576	44	38	49	53	47	36	43	49	45	58	44	69	---
	Males	347	25	22	31	36	26	18	27	27	26	40	27	42	---
	Females	229	19	16	18	17	21	18	16	22	20	18	17	27	---
70 to 75	Total	483	28	32	43	47	44	36	36	55	40	38	50	32	2
	Males	276	18	25	25	20	22	25	19	29	20	26	28	18	1
	Females	207	10	7	18	27	22	11	17	26	20	12	22	14	1
75 to 80	Total	462	35	54	40	42	49	20	32	41	33	27	43	44	2
	Males	249	20	22	21	23	30	11	12	23	21	17	28	19	2
	Females	213	15	32	19	19	19	9	20	18	12	10	15	25	---
80 to 85	Total	328	22	33	24	22	25	27	22	31	34	20	25	43	---
	Males	190	12	16	19	14	17	19	13	19	18	10	13	20	---
	Females	138	10	17	5	8	8	8	9	12	16	10	12	23	---
85 to 90	Total	179	11	15	10	16	14	10	7	17	14	18	23	23	1
	Males	109	8	12	5	14	5	4	5	9	8	15	11	12	1
	Females	70	3	3	5	2	9	6	2	8	6	3	12	11	---
90 to 95	Total	54	6	3	7	4	3	5	4	5	4	7	4	2	---
	Males	29	2	1	2	2	1	3	2	3	4	6	1	2	---
	Females	25	4	2	5	2	2	2	2	2	---	1	3	---	---
95 to 100	Total	21	2	2	3	2	2	---	1	1	1	2	2	3	---
	Males	6	---	1	1	1	---	---	1	---	---	---	1	1	---
	Females	15	2	1	2	1	2	---	---	1	1	2	1	2	---
100 and over	Total	8	---	---	1	---	---	1	---	---	---	1	3	1	1
	Males	5	---	---	1	---	---	---	---	---	---	---	2	1	1
	Females	3	---	---	---	---	---	1	---	---	---	1	1	---	---
Unknown	Total	173	7	6	11	14	12	11	15	18	15	16	14	22	12
	Males	93	3	2	7	8	8	7	6	10	7	11	8	9	7
	Females	76	4	4	4	6	3	3	9	7	7	5	6	13	5
	Unknown	4	---	---	---	---	1	1	---	1	1	---	---	---	---

DEATHS—BY AGES, BY SEX, BY MONTHS.

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TABLE VI.—CONTINUED.—Deaths by Ages, by Sex, by Months.

AGES IN YEARS.		SEX.	YEAR, 1879.	MONTHS, 1879.												
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
12	Total.....	110	7	8	16	6	2	5	5	21	17	8	8	7	---	---
	Males.....	56	5	4	11	2	2	1	2	9	8	5	4	3	---	---
	Females..	53	1	4	5	4	---	4	3	12	9	3	4	4	---	---
	Unknown	1	1	---	---	---	---	---	---	---	---	---	---	---	---	---
1	Total.....	552	30	52	66	59	47	52	79	132	108	69	80	76	2	---
	Males.....	434	18	27	34	37	22	21	42	66	58	32	40	36	1	---
	Females..	418	12	25	32	22	25	31	37	66	50	37	40	40	1	---
2	Total.....	542	43	42	38	40	38	32	44	70	54	33	44	56	2	---
	Males.....	285	26	22	22	24	20	14	14	29	36	16	27	33	2	---
	Females..	257	17	20	16	16	18	18	30	41	18	23	17	23	---	---
3	Total.....	385	33	19	26	29	18	20	31	28	42	41	40	57	1	---
	Males.....	193	17	10	11	14	9	5	18	15	22	20	28	29	1	---
	Females..	186	16	9	15	15	9	15	13	13	20	21	12	28	---	---
4	Total.....	359	34	24	24	18	30	22	23	23	42	37	33	44	---	---
	Males.....	178	13	12	15	5	16	15	11	18	19	16	15	23	---	---
	Females..	181	21	12	9	13	14	7	12	10	23	21	18	21	---	---
5	Total.....	239	20	14	18	18	20	10	10	23	27	16	29	33	1	---
	Males.....	123	12	10	9	9	10	5	4	12	17	6	19	14	1	---
	Females..	111	8	4	9	9	10	5	6	11	10	10	10	19	---	---
6	Total.....	262	14	15	14	17	15	14	14	24	31	35	34	34	1	---
	Males.....	141	8	5	5	8	11	7	8	12	16	26	16	18	1	---
	Females..	121	6	10	9	9	4	7	6	12	15	9	18	16	---	---
7	Total.....	208	11	9	15	9	12	12	18	16	21	31	25	29	---	---
	Males.....	104	4	3	6	4	8	4	9	7	15	20	10	14	---	---
	Females..	104	7	6	9	5	4	8	9	9	6	11	15	15	---	---
8	Total.....	169	11	4	9	17	9	13	15	15	15	22	21	18	---	---
	Males.....	88	7	1	5	9	3	10	9	9	6	8	14	7	---	---
	Females..	81	4	3	4	8	6	3	6	6	9	14	7	11	---	---
9	Total.....	147	11	8	5	8	2	5	7	23	14	27	20	17	---	---
	Males.....	62	4	3	4	2	1	3	3	12	6	13	5	6	---	---
	Females..	85	7	5	1	6	1	2	4	11	8	14	15	11	---	---
10	Total.....	131	8	5	4	10	14	5	12	13	13	19	11	16	1	---
	Males.....	67	4	3	2	6	9	4	6	6	6	10	2	8	1	---
	Females..	64	4	2	2	4	5	1	6	7	7	9	9	8	---	---
11	Total.....	112	10	4	8	7	2	9	9	13	19	7	11	12	1	---
	Males.....	51	3	3	4	2	1	5	5	4	7	4	5	6	1	---
	Females..	61	7	1	4	5	1	4	3	9	12	3	6	6	---	---

TABLE VI.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

AGES IN YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
12.....	Total.....	122	9	6	6	7	7	13	6	9	11	20	11	17
	Males.....	57	5	3	2	4	3	8	3	4	4	9	4	8
	Females..	65	4	3	4	3	4	5	3	5	7	11	7	9
13.....	Total.....	106	5	8	8	9	9	6	8	8	11	15	9	10
	Males.....	57	1	3	3	2	6	5	5	6	6	8	7	5
	Females..	49	4	5	5	7	3	1	3	2	5	7	2	5
14.....	Total.....	78	4	3	9	9	7	5	3	5	7	8	6	11
	Males.....	27			2	5	2	2	2		3	3	3	4
	Females..	51	4	3	7	4	5	3	1	5	4	5	3	7
15.....	Total.....	83	6	8	10	5	4	3	9	8	6	8	10	6
	Males.....	31	2	5	4		2	1	6	4	3		3	1
	Females..	52	4	3	6	5	2	2	3	4	3	5	7	5
16.....	Total.....	96	6	9	6	7	5	8	11	6	10	8	8	12
	Males.....	39	2	5	3	4		5	4	1	4	1	3	7
	Females..	57	4	4	3	3	5	3	7	5	6	7	5	5
17.....	Total.....	129	4	8	14	7	17	8	10	6	14	14	11	16
	Males.....	43	2	3	3	4	6	2	3	2	4	6	3	5
	Females..	86	2	5	11	3	11	6	7	4	10	8	8	11
18.....	Total.....	117	6	9	8	11	10	8	8	15	16	8	6	10
	Males.....	42	1	2	2	6	6	4	5	4	4	2	2	4
	Females..	75	5	7	6	5	4	4	3	11	12	6	4	6
19.....	Total.....	133	6	9	9	11	11	3	11	7	23	16	11	14
	Males.....	65	4	5	3	3	5	1	6	4	15	5	5	8
	Females..	68	2	4	6	8	6	2	5	3	8	11	6	6
20.....	Total.....	132	4	8	9	9	6	16	15	13	17	6	16	13
	Males.....	58	3	4	6	5	3	6	7	3	8	2	5	6
	Females..	74	1	4	3	4	3	10	8	10	9	4	11	7
21.....	Total.....	129	4	10	12	17	9	12	8	8	8	9	17	15
	Males.....	54	3	3	2	9	3	8	4	4	2	5	7	4
	Females..	75	1	7	10	8	6	4	4	4	6	4	10	11
22.....	Total.....	133	7	7	11	9	9	13	9	13	16	8	11	18
	Males.....	64	5	4	4	6	5	4	5	6	8	3	6	8
	Females..	69	2	3	7	3	4	9	4	7	8	5	5	10
23.....	Total.....	100	9	6	10	5	8	5	9	9	13	11	13	11
	Males.....	49	8	3	4	3	2	1	2	3	6	7	6	4
	Females..	60	1	3	6	2	6	4	7	6	7	4	7	7

TABLE VI.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

AGES IN YEARS.		SEX.	YEAR, 1879.	MONTHS, 1879.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
24.....	Total.....	138	9	13	11	15	5	12	14	11	9	11	17	11	---
	Males.....	56	3	5	5	3	1	6	5	6	4	4	9	5	---
	Females.....	82	6	8	6	12	4	6	9	5	5	7	8	6	---
25.....	Total.....	122	6	9	9	8	7	9	13	15	10	13	8	15	---
	Males.....	56	3	6	4	1	4	2	6	4	5	7	6	8	---
	Females.....	66	3	3	5	7	3	7	7	11	5	6	2	7	---
26.....	Total.....	101	3	9	3	13	8	3	11	8	10	7	11	10	---
	Males.....	38	1	3	1	3	4	---	6	4	3	4	4	3	---
	Females.....	63	2	6	2	10	4	3	5	4	7	3	7	7	---
27.....	Total.....	113	2	7	4	11	15	9	8	11	12	9	15	9	---
	Males.....	49	1	1	3	5	6	5	3	5	6	3	8	2	---
	Females.....	64	1	6	1	6	9	4	5	6	6	6	7	7	---
28.....	Total.....	116	9	11	5	8	12	6	12	8	12	9	11	13	---
	Males.....	45	3	4	1	4	4	3	4	4	6	2	5	5	---
	Females.....	71	6	7	4	4	8	3	8	4	6	7	6	8	---
29.....	Total.....	93	7	3	4	11	7	11	6	10	9	10	9	6	---
	Males.....	31	4	---	2	5	1	4	1	5	3	3	1	2	---
	Females.....	62	3	3	2	6	6	7	5	5	6	7	8	4	---
30.....	Total.....	110	8	7	10	12	15	4	9	10	7	10	5	13	---
	Males.....	58	4	3	6	8	7	2	6	7	3	4	1	7	---
	Females.....	52	4	4	4	4	8	2	3	3	4	6	4	6	---
31.....	Total.....	71	6	6	2	2	9	4	4	6	6	6	9	11	---
	Males.....	27	1	4	1	1	2	4	2	3	1	---	4	4	---
	Females.....	44	5	2	1	1	7	---	2	3	5	6	5	7	---
32.....	Total.....	116	14	9	10	17	5	9	8	6	8	10	3	12	---
	Males.....	53	5	1	5	7	3	5	6	3	3	5	5	5	---
	Females.....	63	9	8	5	10	2	4	2	3	5	5	3	7	---
33.....	Total.....	90	7	5	8	5	3	6	13	8	4	12	9	10	---
	Males.....	37	5	2	4	1	2	1	6	2	---	5	4	5	---
	Females.....	53	2	3	4	4	1	5	7	6	4	7	5	5	---
34.....	Total.....	83	6	4	5	5	4	5	12	3	9	3	13	9	---
	Males.....	36	3	1	1	1	1	1	4	2	5	6	6	5	---
	Females.....	47	3	3	4	4	3	4	8	1	4	2	7	4	---
35.....	Total.....	123	10	12	9	8	8	10	9	16	9	10	10	12	---
	Males.....	54	5	6	5	2	4	5	4	8	3	5	4	3	---
	Females.....	69	5	6	4	6	4	5	5	8	6	5	6	9	---
36.....	Total.....	110	11	11	4	10	11	11	9	8	3	3	6	13	---
	Males.....	50	5	4	3	5	6	3	5	3	4	3	1	3	---
	Females.....	60	6	7	1	5	5	8	4	5	4	5	5	5	---

TABLE VI.—CONTINUED.—Deaths by Ages, by Sex, by Months.

AGES IN YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.												
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
37.....	Total.....	91	6	6	11	6	12	6	13	6	4	7	4	10	.....
	Males.....	36	3	3	4	3	5	2	7	1	1	2	1	4	.....
	Females..	55	3	3	7	3	7	4	6	5	3	5	3	6	.....
38.....	Total.....	100	6	6	8	7	8	5	8	12	8	13	7	12	.....
	Males.....	37	4	5	1	.....	2	3	3	3	4	5	3	4	.....
	Females..	63	2	1	7	7	6	2	5	9	4	8	4	8	.....
39.....	Total.....	96	9	3	8	11	5	4	8	8	9	8	13	10	.....
	Males.....	45	4	2	4	6	3	3	3	3	2	5	7	3	.....
	Females..	51	5	1	4	5	2	1	5	5	7	3	6	7	.....
40.....	Total.....	110	9	13	10	6	6	6	3	15	9	11	6	16	.....
	Males.....	52	5	6	8	2	3	2	1	8	5	3	3	6	.....
	Females..	58	4	7	2	4	3	4	2	7	4	8	3	10	.....
41.....	Total.....	62	4	11	6	6	3	4	9	6	.....	2	4	7	.....
	Males.....	33	3	4	2	3	2	3	4	4	.....	3	5	.....
	Females..	29	1	7	4	3	1	1	5	2	.....	2	1	2	.....
42.....	Total.....	87	7	5	5	9	13	7	3	9	5	7	6	11	.....
	Males.....	50	6	1	3	6	9	6	2	5	1	1	4	6	.....
	Females..	37	1	4	2	3	4	1	1	4	4	6	2	5	.....
43.....	Total.....	98	7	11	5	16	7	7	3	7	11	7	11	6	.....
	Males.....	45	5	6	.....	7	3	2	2	3	3	5	6	3	.....
	Females..	53	2	5	5	9	4	5	1	4	8	2	5	3	.....
44.....	Total.....	56	2	3	4	7	4	3	5	6	3	7	2	10	.....
	Males.....	27	.....	1	2	6	2	.....	4	2	1	2	1	6	.....
	Females..	29	2	2	2	1	2	3	1	4	2	5	1	4	.....
45.....	Total.....	111	5	9	10	16	10	9	9	17	8	2	11	5	.....
	Males.....	54	4	4	5	6	6	2	6	6	4	1	7	3	.....
	Females..	57	1	5	5	10	4	7	3	11	4	1	4	2	.....
46.....	Total.....	58	5	6	4	3	3	2	2	5	7	12	3	6	.....
	Males.....	34	1	5	1	1	1	2	2	1	5	7	3	5	.....
	Females..	24	4	1	3	2	2	.....	.....	4	2	5	.....	1	.....
47.....	Total.....	62	5	6	5	8	5	2	7	5	3	3	9	4	.....
	Males.....	30	3	3	2	3	3	1	3	2	1	2	5	2	.....
	Females..	32	2	3	3	5	2	1	4	3	2	1	4	2	.....
48.....	Total.....	107	6	8	7	11	8	13	9	10	12	5	8	10	.....
	Males.....	66	4	6	3	7	7	11	5	5	5	3	3	7	.....
	Females..	41	2	2	4	4	1	2	4	5	7	2	5	3	.....
49.....	Total.....	69	5	6	7	6	7	3	7	4	4	8	7	5	.....
	Males.....	41	3	5	4	2	4	2	6	.....	1	5	6	3	.....
	Females..	28	2	1	3	4	3	1	1	4	3	3	1	2	.....

TABLE VI.—CONTINUED.—Deaths by Ages, by Sex, by Months.

AGES IN YEARS.		SEX.	YEAR, 1879.	MONTHS, 1879.												
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
50.....	Total.....	98	7	6	6	5	8	6	7	12	14	7	8	12	.....
	Males.....	55	3	3	.....	1	6	4	4	9	11	4	3	7	.....
	Females..	43	4	3	6	4	2	2	3	3	3	3	5	5	.....
51.....	Total.....	56	2	2	8	3	7	5	5	8	5	4	3	4	.....
	Males.....	32	2	.....	6	2	4	4	2	2	4	2	1	3	.....
	Females..	24	.....	2	2	1	3	1	3	6	1	2	2	1	.....
52.....	Total.....	93	8	6	5	10	9	5	9	5	11	7	8	10	.....
	Males.....	44	2	2	2	7	6	2	6	3	5	4	3	2	.....
	Females..	49	6	4	3	3	3	3	3	2	6	3	5	8	.....
53.....	Total.....	65	5	5	2	3	6	8	4	7	7	3	6	9	.....
	Males.....	35	2	3	.....	1	4	4	3	4	4	2	2	6	.....
	Females..	30	3	2	2	2	2	4	1	3	3	1	4	3	.....
54.....	Total.....	82	5	8	9	6	4	3	4	8	11	9	9	6	.....
	Males.....	53	4	6	2	4	2	2	2	5	8	5	8	5	.....
	Females..	29	1	2	7	2	2	1	2	3	3	4	1	1	.....
55.....	Total.....	80	5	3	5	7	6	4	5	13	7	4	6	15	.....
	Males.....	48	3	2	2	5	2	3	2	9	4	3	3	10	.....
	Females..	32	2	1	3	2	4	1	3	4	3	1	3	5	.....
56.....	Total.....	90	9	5	5	6	9	5	8	8	7	10	4	14	.....
	Males.....	51	5	4	5	4	4	3	2	7	3	7	3	4	.....
	Females..	39	4	1	.....	2	5	2	6	1	4	3	1	10	.....
57.....	Total.....	92	5	8	5	12	10	5	8	10	8	6	6	7	.....
	Males.....	52	4	3	3	5	5	3	5	6	2	5	6	5	.....
	Females..	40	1	5	2	7	5	2	3	4	6	1	2	2	.....
58.....	Total.....	87	7	6	5	9	12	.....	5	9	9	3	7	15	.....
	Males.....	47	2	3	3	4	6	.....	1	7	7	1	5	8	.....
	Females..	40	5	3	2	5	6	.....	4	2	2	2	2	7	.....
59.....	Total.....	83	2	3	5	10	10	10	7	9	7	10	7	8	.....
	Males.....	40	.....	3	1	6	5	4	4	4	4	7	4	7	.....
	Females..	39	2	.....	4	4	5	6	3	5	3	3	3	1	.....
60.....	Total.....	123	4	6	10	7	13	9	8	13	9	15	17	11	.....
	Males.....	76	3	4	4	2	7	7	6	7	5	12	13	5	.....
	Females..	47	1	2	6	5	6	2	2	6	4	3	4	6	.....
61.....	Total.....	68	2	5	6	6	5	3	6	10	4	6	5	10	.....
	Males.....	37	1	3	2	3	3	3	4	4	2	5	3	4	.....
	Females..	31	1	2	4	3	2	.....	2	6	2	1	2	6	.....
62.....	Total.....	78	5	2	7	9	9	5	6	5	7	6	6	9	.....
	Males.....	45	3	1	3	4	4	3	3	4	6	4	4	6	.....
	Females..	31	2	1	4	5	5	2	3	1	1	2	2	3	.....

VITAL STATISTICS OF MICHIGAN, 1879.

EXHIBIT C.—Deaths in Michigan during the Year 1879, as Returned, as Corrected for Omissions in Enumerating, the same Equalized for Increase of Population during the Year covered by the Returns, and the Deaths as thus Corrected and Equalized for the several Months, Equalized for Months of a uniform length of 30.44 days; also, indicating some of the steps by which these results have been reached.

	TOTAL ^a	MONTHS, 1879.											
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Deaths as returned by Registration Officers.....	14,398	903	992	1,114	1,174	1,083	902	1,183	1,537	1,403	1,286	1,268	1,551
Per cent. of deaths to be added for correction for time elapsing before enumeration.....	08.50	64.22	59.94	55.66	51.38	47.10	42.82	38.54	34.26	29.98	25.70	21.42	
Number of deaths to be added for above correction.....	6,176	619	637	663	653	556	435	507	592	481	386	326	336
Deaths, if enumerated in months of occurrence.....	20,542	1,522	1,629	1,782	1,827	1,639	1,327	1,690	2,129	1,884	1,672	1,594	1,847
Per cent. of deaths to be added to equalize them to population at close of year.....	4.21	3.86	3.51	3.16	2.81	2.46	2.11	1.76	1.41	1.06	.71	.35	
Deaths to be added to equalize them to population at close of year.....	462	61	63	63	58	46	33	36	37	27	18	11	6
Deaths, as corrected, equalized to population at close of year.....	21,004	1,586	1,692	1,845	1,885	1,685	1,360	1,726	2,166	1,911	1,690	1,605	1,853
Days and hundredths by which the months should be increased or diminished to equalize them to months of uniform length.....	—56	+ 2.44	—56	+ .44	—56	—56	+ .44	—56	—56	+ .44	—56	+ .44	—56
Number by which the deaths should be increased or diminished to equalize them to months of uniform length.....	+ 21	—29	+ 147	—33	+ 28	—30	+ 20	—31	—39	+ 28	—31	+ 24	—33
Deaths, corrected and equalized, equalized to months of uniform length.....	21,025	1,557	1,839	1,812	1,913	1,655	1,380	1,685	2,127	1,930	1,659	1,639	1,820

^a Excluding 41 in unknown month.

The last line in Exhibit C probably supplies better data than any other line for comparisons of the several months with each other, for it shows the number of deaths for each month in a population equaling that at the close of the year.

EXHIBIT D.—*Deaths during the Years 1876 to 1879, inclusive, as Corrected for Omissions in the Enumeration, Exhibiting the Number and Per Cent. of Total, by Months arranged in Order by Number, Months having the greatest number first.*

ORDER.	1876.			1877.			1878.			1879.		
	Months.	Num-ber.	Per Ct. of Total.	Months.	Num-ber.	Per Ct. of Total.	Months.	Num-ber.	Per Ct. of Total.	Months.	Num-ber.	Per Ct. of Total.
	Total...	18,389	100.00	Total...	18,341	100.00	Total...	18,866	100.00	Total...	20,583	100.00
1	Aug.....	2,134	11.60	Aug....	2,148	11.71	Aug.....	1,963	10.43	Aug.....	2,129	10.34
2	Sept....	1,949	10.60	Sept....	1,970	10.20	Sept....	1,863	9.87	Sept....	1,884	9.15
3	Mar.....	1,606	8.73	Oct....	1,580	8.61	Dec.....	1,700	9.01	Dec.....	1,847	8.97
4	July.....	1,578	8.53	Mar....	1,572	8.57	Apr.....	1,676	8.83	Apr.....	1,827	8.83
5	Apr.....	1,566	8.52	Apr....	1,512	8.24	Oct.....	1,593	8.44	Mar.....	1,782	8.66
6	May.....	1,508	8.20	July...	1,477	8.05	Mar.....	1,560	8.27	July....	1,690	8.21
7	Oct.....	1,497	8.14	May....	1,463	8.00	Nov.....	1,524	8.08	Oct.....	1,672	8.12
8	Dec.....	1,420	7.72	Dec....	1,397	7.62	July....	1,509	8.00	May....	1,639	7.96
9	Feb.....	1,355	7.37	Feb....	1,374	7.49	May....	1,459	7.73	Feb....	1,620	7.92
10	June....	1,290	7.01	Nov....	1,327	7.24	Feb....	1,362	7.22	Nov....	1,594	7.74
11	Nov.....	1,263	6.87	Jan....	1,281	6.98	June....	1,333	7.07	Jan....	1,522	7.40
12	Jan.....	1,192	6.48	June...	1,279	6.97	Jan.....	1,295	6.86	June....	1,327	6.45
	Unk.....	31	.17	Unk....	56	.31	Unk.....	24	.13	Unk.....	41	.20
	Av..... ^a	1,532	8.33	Av..... ^a	1,528	8.33	Av..... ^a	1,572	8.33	Av..... ^a	1,715	8.33

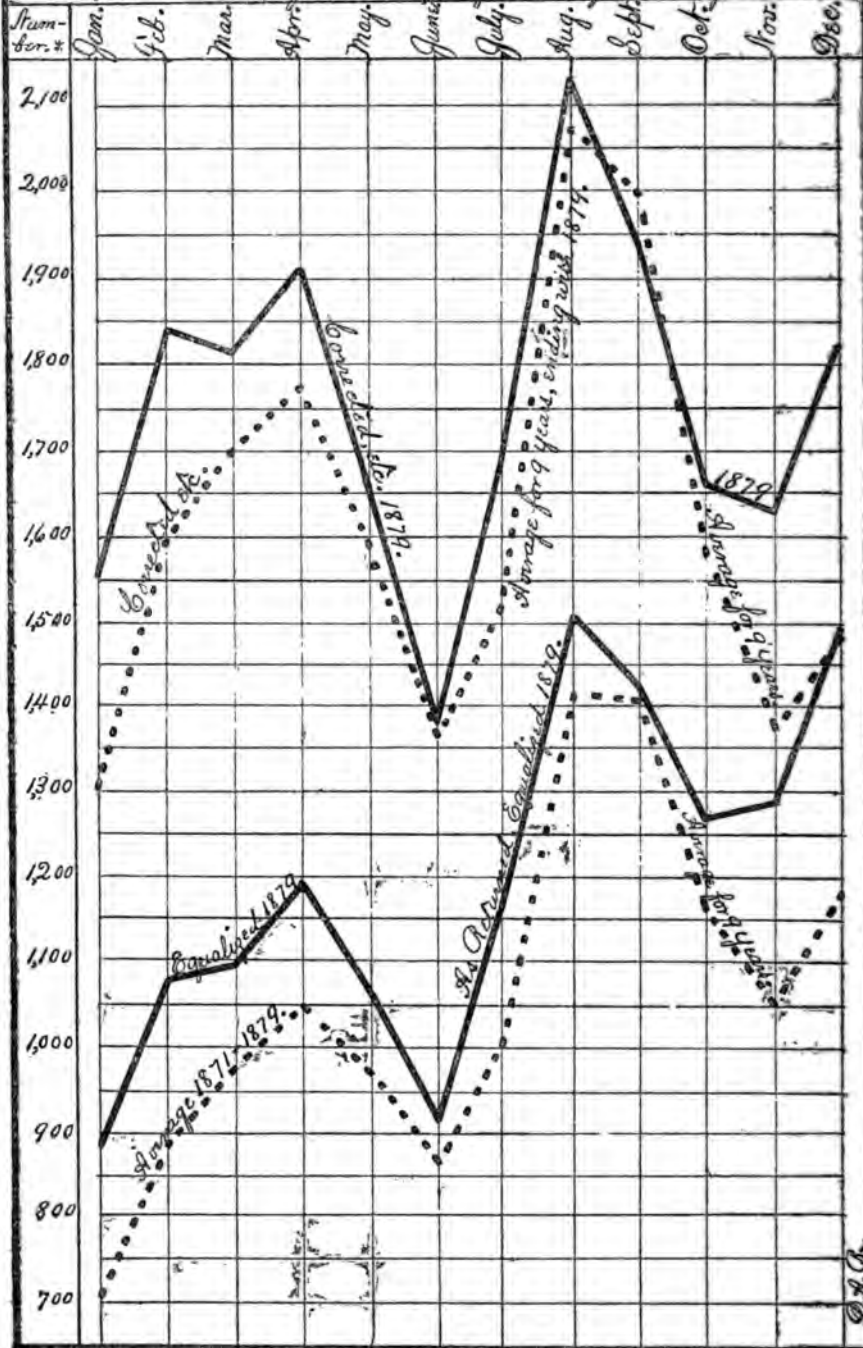
^a Including deaths in unknown month.

Exhibit D may be compared with Table II., page 106, in which the deaths are enumerated as they were returned.

Diagram No. 3, following, exhibits graphically the relative proportion of deaths in each month, as first returned and as corrected for omissions in the enumeration, for 1879. Also, the average for each month of 1871-1879.

Diagram No. 3.

Deaths in Michigan in 1879, and Average for 9 years ending with 1879, as Returned, as Corrected for Omissions and Equalized for Increase of Population; in each case, by months Equalized to uniform length.



* Scale = 22.4 to the inch.

Designed by Henry B. Baker.

TABLE VI.—CONTINUED.—*Deaths by Age, by Sex, by Months.*

AGES IN YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.												
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
103.....	Males.....	1	—	—	—	—	—	—	—	—	—	1	—	—	
105.....	Males.....	1	—	—	—	—	—	—	—	—	—	—	1	—	
106.....	Females..	1	—	—	—	—	—	—	—	—	1	—	—	—	
107.....	Females..	1	—	—	—	—	—	—	—	—	—	1	—	—	
Unknown	Total.....	173	7	6	11	14	12	11	13	18	15	16	14	22	12
	Males.....	93	3	2	7	8	8	7	6	10	7	11	8	9	7
	Females..	76	4	4	4	6	3	3	9	7	7	5	6	13	5
	Unknown	4	—	—	—	—	1	1	—	1	1	—	—	—	—

STILL-BIRTHS, 1879.

The ratio of still-births to the total number of deaths is shown in Exhibit 2. In the comparison from 1874 to 1879, years in which the returns of deaths are corrected by returns of births, it is seen that the number and per cent. of still-births returned were greatest in 1878. In 1879, although there were returned 749 still-births, the per cent. of still-births to the whole number of deaths was less than for the years 1875, 1877 and 1878, and less than the average for the six years.

EXHIBIT 2.—*The Relation of Still-births to All Persons Returned as having Died in Michigan during the several Years 1874 to 1879, and as per Returns of Deaths corrected by Returns of Births for the Years 1874 to 1879, inclusive.*

	TOTAL DEATHS AND STILL-BIRTHS					
	1874.	1875.	1876.	1877.	1878.	1879.
Total Number of Deaths.....	12,500	11,990	12,576	12,919	12,766	14,407
Number of Still-births.....	464	629	646	720	793	749
Per Cent. of Still-births to Total Deaths.....	3.71	5.25	5.14	5.57	6.21	5.20

17—1879.

AGES OF PERSONS WHO DIED IN MICHIGAN IN 1879.

Table IV. exhibits the number of deaths by periods of age, and by sex, that were returned for the year 1879. It also shows the per cent. of deaths at each age to total at all ages, and the excess, in per cent. and number, of deaths at each age, relative to the two sexes. According to this table 24.68 per cent. of all the deaths were of children under one year of age, the largest portion occurring among the males.

TABLE IV.—*Exhibiting, by Sex, and by Age in Periods of Years, the Number and Proportion of Persons Returned as having Died in Michigan during the Year 1879; also the Excess of Persons of each Sex.*

AGES IN YEARS AND PERIODS.	NUMBER OF DEATHS, 1879.				PER CT. OF DEATHS AT EACH AGE TO TOTAL AT ALL AGES.			PER CT. OF EACH SEX TO TOTAL OF BOTH SEXES.				EXCESS OF THE SEXES BY NUMBER.		Males to 100 Fe- males.
	Total.	Males.	Fe- males.	Unk.	Total.	Males.	Fe- males.	Males.	Fe- males.	Excess.		Males.	Fe- males.	
										Males.	Fe- males.			
All Ages...	14,407	7,522	6,848	37	100.00	100.00	100.00	52.35	47.65	4.70	-----	674	-----	109.84
Under 1....	3,555	2,015	1,507	33	24.68	20.79	22.01	57.21	42.79	14.42	-----	508	-----	133.71
1 to 2.....	852	434	412	-----	5.91	5.77	6.10	50.94	49.06	1.88	-----	16	-----	103.83
2 to 3.....	512	285	257	-----	3.76	3.79	3.75	52.58	47.42	5.16	-----	23	-----	110.90
3 to 4.....	335	199	186	-----	2.67	2.65	2.72	51.69	48.31	3.33	-----	13	-----	106.99
4 to 5.....	333	178	181	-----	2.49	2.37	2.64	49.58	50.42	-----	.81	-----	3	98.34
Under 5....	5,693	3,111	2,549	33	39.52	41.36	37.22	54.96	43.04	9.92	-----	562	-----	122.05
5 to 10.....	1,025	523	502	-----	7.11	6.95	7.33	51.02	48.98	2.04	-----	21	-----	104.18
10 to 15....	549	259	290	-----	3.81	3.44	4.23	47.18	52.82	-----	5.64	-----	31	89.31
15 to 20....	558	220	328	-----	3.87	2.92	4.94	39.13	60.57	-----	21.14	-----	118	65.09
20 to 25....	641	281	360	-----	4.45	3.74	5.26	43.84	56.16	-----	12.32	-----	79	78.06
25 to 30....	545	217	328	-----	3.78	2.88	4.79	39.82	60.18	-----	20.36	-----	111	66.16
30 to 35....	470	211	259	-----	3.26	2.81	3.78	41.89	55.11	-----	10.22	-----	48	81.47
35 to 40....	520	222	298	-----	3.61	2.95	4.35	42.60	57.31	-----	14.62	-----	76	74.50
40 to 45....	413	207	206	-----	2.87	2.73	3.01	50.12	49.88	.24	-----	1	-----	100.49
45 to 50....	407	225	182	-----	2.83	2.99	2.68	55.28	44.72	10.56	-----	43	-----	123.63
50 to 55....	394	219	175	-----	2.73	2.91	2.56	55.58	44.42	11.16	-----	44	-----	123.14
55 to 60....	437	247	190	-----	3.03	3.28	2.77	56.52	43.48	13.04	-----	57	-----	130.00
60 to 65....	471	276	195	-----	3.27	3.67	2.85	58.60	41.40	17.20	-----	81	-----	141.54
65 to 70....	576	347	229	-----	4.00	4.61	3.34	60.24	39.76	20.48	-----	118	-----	151.53
70 to 75....	483	278	207	-----	3.35	3.67	3.02	57.14	42.86	14.28	-----	69	-----	133.33
75 to 80....	462	249	213	-----	3.21	3.31	3.11	53.90	46.10	7.80	-----	36	-----	116.90
80 to 85....	328	190	138	-----	2.28	2.53	2.02	57.93	42.07	15.86	-----	52	-----	137.63
85 to 90....	173	102	70	-----	1.24	1.36	1.02	56.98	39.11	17.87	-----	32	-----	145.71
90 to 95....	54	29	25	-----	.37	1.39	.37	53.70	46.30	7.40	-----	4	-----	116.00
95 to 100....	21	6	15	-----	.15	.08	.22	28.57	71.43	-----	42.86	-----	9	40.00
100 and over	8	6	3	-----	.06	.07	.04	62.50	37.50	25.00	-----	2	-----	166.67
Unk. Ages.	173	93	76	4	1.20	1.24	1.11	55.03	44.97	10.06	-----	17	-----	122.57

EXHIBIT F.—*Decedents in Michigan in 1879, by Sex, and Excess of the Sexes, by Age in Years.*

AGE IN YEARS.	DECEDENTS, 1879.				EXCESS.		AGE IN YEARS.	DECEDENTS, 1879.				EXCESS.	
	Total.	Males.	Fe- males.	Unk.	Males.	Fe- males.		Total.	Males.	Fe- males.	Unk.	Males.	Fe- males.
All Ages...	14,407	7,522	6,848	37	674	-----	35.....	123	54	69	-----	-----	15
Under 1....	3,355	2,015	1,507	33	508	-----	36.....	110	50	60	-----	-----	10
1.....	852	434	418	-----	16	-----	37.....	91	36	55	-----	-----	19
2.....	542	285	257	-----	28	-----	38.....	100	37	63	-----	-----	26
3.....	525	199	186	-----	13	-----	39.....	96	45	51	-----	-----	6
4.....	339	178	181	-----	-----	3	40.....	110	52	58	-----	-----	6
5.....	239	128	111	-----	17	-----	41.....	62	33	29	-----	4	-----
6.....	262	141	121	-----	20	-----	42.....	87	50	37	-----	13	-----
7.....	209	104	104	-----	-----	-----	43.....	98	45	53	-----	-----	8
8.....	169	68	81	-----	7	-----	44.....	56	27	29	-----	-----	2
9.....	147	62	85	-----	-----	23	45.....	111	54	57	-----	-----	3
10.....	131	67	64	-----	3	-----	46.....	58	34	24	-----	10	-----
11.....	112	51	61	-----	-----	10	47.....	62	30	32	-----	-----	2
12.....	122	57	65	-----	-----	8	48.....	107	66	41	-----	25	-----
13.....	106	57	49	-----	8	-----	49.....	69	41	28	-----	13	-----
14.....	78	27	51	-----	-----	24	50.....	98	55	43	-----	12	-----
15.....	83	31	52	-----	-----	21	51.....	56	32	24	-----	8	-----
16.....	96	39	57	-----	-----	18	52.....	93	44	49	-----	-----	5
17.....	129	43	86	-----	-----	43	53.....	65	35	30	-----	5	-----
18.....	117	42	75	-----	-----	33	54.....	82	53	29	-----	24	-----
19.....	133	65	68	-----	-----	3	55.....	80	48	32	-----	16	-----
20.....	132	58	74	-----	-----	16	56.....	90	51	39	-----	12	-----
21.....	129	54	75	-----	-----	21	57.....	92	52	40	-----	12	-----
22.....	133	64	69	-----	-----	5	58.....	87	47	40	-----	7	-----
23.....	109	49	60	-----	-----	11	59.....	85	49	36	-----	10	-----
24.....	138	56	82	-----	-----	26	60.....	123	76	47	-----	29	-----
25.....	122	56	66	-----	-----	10	61.....	68	37	31	-----	6	-----
26.....	101	36	65	-----	-----	29	62.....	76	45	31	-----	14	-----
27.....	113	49	64	-----	-----	15	63.....	86	46	40	-----	6	-----
28.....	116	45	71	-----	-----	26	64.....	118	72	46	-----	26	-----
29.....	93	31	62	-----	-----	31	65.....	130	80	50	-----	30	-----
30.....	110	59	52	-----	6	-----	66.....	88	52	36	-----	16	-----
31.....	71	27	44	-----	-----	17	67.....	114	70	44	-----	26	-----
32.....	116	53	63	-----	-----	10	68.....	129	75	54	-----	21	-----
33.....	90	37	53	-----	-----	16	69.....	115	70	45	-----	25	-----
34.....	83	36	47	-----	-----	11	70.....	105	66	39	-----	27	-----
							71.....	78	38	40	-----	-----	2

VITAL STATISTICS OF MICHIGAN, 1879.

EXHIBIT 3.—Of the Children Born in 1878, the Number who Died during the Year 1878; the Number who Died during the Year 1879, under One Year of Age; The Total Number who Died under One Year of Age; and the Per Cent. of Decedents Aged under One Year to the Children Born in 1878.

MONTHS OF BIRTH AND OF DEATH.	CHILDREN BORN IN 1878.					MALES BORN IN 1878.					FEMALES BORN IN 1878.				
	Births in 1878, as Returned.	Died during the Year 1878.	Died under 1 Year during the Year 1879.	Total Died under 1 Year. Aged under 1 Year.	Per Cent. of Deaths under 1 to Births.	Births of Males in 1878, as Returned.	Died during the Year 1878.	Died under 1 Year during the Year 1879.	Total Died under 1 Year. Aged under 1 Year.	Per Cent. of Deaths under 1 to Births.	Births of Females in 1878, as Returned.	Died during the Year 1878.	Died under 1 Year during the Year 1879.	Total Died under 1 Year. Aged under 1 Year.	Per Cent. of Deaths under 1 to Births.
Total.....*	35,130	2,637	668	3,305	9.41	18,204	1,481	373	1,854	10.13	16,960	1,156	295	1,451	8.61
January.....	2,901	223	.....	228	10.13	1,180	130	.....	130	11.02	1,012	93	.....	93	9.19
February.....	2,414	231	6	237	9.82	1,253	119	5	124	9.85	1,150	112	1	113	9.83
March.....	2,886	250	12	262	9.24	1,444	123	6	129	8.93	1,390	127	6	133	9.57
April.....	2,937	269	34	303	10.32	1,538	150	23	173	11.25	1,391	119	11	130	9.85
May.....	2,805	242	24	266	9.43	1,400	130	12	142	10.14	1,400	112	12	124	8.86
June.....	2,797	228	33	261	9.83	1,472	129	19	148	10.65	1,323	99	14	113	8.54
July.....	2,385	236	42	278	9.81	1,462	140	20	160	10.94	1,370	96	22	118	8.61
August.....	3,225	286	44	290	8.90	1,721	128	22	150	8.72	1,570	108	22	130	8.28
September.....	3,263	199	93	298	9.14	1,733	121	60	181	10.44	1,523	78	30	117	7.69
October.....	3,266	171	113	284	8.70	1,712	103	62	165	9.64	1,546	63	51	119	7.70
November.....	3,061	160	118	278	9.08	1,529	95	67	162	10.60	1,527	65	51	116	7.60
December.....	3,423	192	143	335	9.79	1,754	113	77	190	10.83	1,659	79	66	145	8.74

* Excluding 32 in unknown month,—20 males, 11 females, and 1 unknown sex.

EXHIBIT 4.—The Months of Birth and of Death of Children Born in 1878 who Died Under One Year of Age.

MONTHS OF BIRTH, 1878.	MONTHS OF DEATH, 1878.												Per Cent. Died under 1 month. ^a	Deaths in 1878, as Re- turned. ^b	Per Cent. of Children who died under 1 month to all children born. ^c
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
Born in 1878, died aged under 1 Yr.	3,305	119	161	179	165	183	243	262	293	260	235	334		35,130	
January	233	103	111	111	4	11	17	19	11	12	4	9	46.19	2,201	4.63
February	237	108	23	11	5	14	14	22	12	7	9	6	45.57	2,414	4.47
March	262	127	7	13	14	19	23	16	11	12	8	4	43.47	2,836	4.43
April	303	150	16	17	21	24	15	11	5	10	7	11	49.50	2,937	5.11
May	266	127	13	25	33	22	7	7	8	3	7	8	47.74	2,805	4.53
June	261	114	15	41	24	13	10	9	5	10	8	2	43.68	2,797	4.03
July	278	132	43	27	16	12	6	10	9	7	5	5	47.48	2,835	4.63
August	280	157	21	21	21	16	4	10	5	9	8	5	56.07	3,295	4.76
September	293	145	20	12	17	8	14	16	9	6	11	14	45.66	3,250	4.45
October	284	185	19	17	13	8	14	12	12	6	13	18	47.54	3,268	4.13
November	278	124	30	9	14	8	10	12	6	14	23	14	44.50	3,061	4.05
December	335	102	12	9	18	15	6	8	18	28	17	4	57.31	3,423	5.61
Deaths at each Age.	3,305	1614	241	213	207	165	134	146	120	125	130	99	43.83		4.59
No. of Deaths, Ages in each Age.	Months	1	2	3	4	5	6	7	8	9	10	11			

^a That is, per cent. of children who died during month of birth to total born in 1878 who died aged under one year.^b Excluding 23 in unknown month, 30 males, 11 females, and 1 of unknown sex.^c That is, of the children born in 1878, the per cent. who died during month of birth, according to the returns of births and of deaths. It should be borne in mind that probably a larger proportion of the births and of the deaths are returned for the later months of the year.

AGES IN YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.												
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Under 1-12	Total.....	1,665	109	123	156	140	124	123	129	140	157	140	131	190	8
	Males.....	962	66	78	90	81	74	78	71	83	98	82	69	101	1
	Females..	674	40	49	65	57	47	47	55	54	57	55	60	87	2
	Unknown	29	3	2	1	2	3	3	3	3	2	3	2	2	---
1-12	Total.....	296	12	20	38	31	33	15	30	26	26	26	13	17	---
	Males.....	175	9	11	25	17	18	8	15	20	20	12	6	14	---
	Females..	119	3	9	13	14	15	7	15	14	6	14	6	3	---
	Unknown	2	---	---	---	---	---	---	---	2	---	---	---	---	---
2-12	Total.....	240	9	9	14	22	11	14	32	26	27	25	29	23	---
	Males.....	136	5	5	10	8	5	5	20	11	19	16	14	18	---
	Females..	104	4	4	4	14	6	9	12	14	8	9	15	5	---
	Unknown	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3-12	Total.....	220	13	14	18	16	21	7	27	38	23	18	9	23	---
	Males.....	115	4	9	8	9	11	4	11	16	12	12	5	14	---
	Females..	111	9	5	10	7	10	3	16	22	11	6	4	8	---
	Unknown	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-12	Total.....	184	8	8	8	15	8	12	22	41	12	26	9	14	---
	Males.....	112	4	5	7	8	3	8	13	22	10	18	6	8	---
	Females..	72	4	3	1	7	5	5	9	19	2	8	3	6	---
	Unknown	---	---	---	---	---	---	---	---	---	---	---	---	---	---
5-12	Total.....	174	4	14	14	10	6	7	15	41	26	10	10	17	---
	Males.....	95	4	8	11	5	2	2	8	23	16	5	2	9	---
	Females..	79	---	6	3	5	4	5	7	18	10	5	8	8	---
	Unknown	---	---	---	---	---	---	---	---	---	---	---	---	---	---
6-12	Total.....	168	6	10	16	12	12	8	26	29	19	10	7	12	1
	Males.....	94	3	5	11	7	5	2	13	20	12	6	4	6	---
	Females..	74	3	5	5	5	7	6	13	9	7	4	3	6	1
	Unknown	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7-12	Total.....	143	5	10	5	9	12	6	18	28	15	11	12	11	1
	Males.....	72	2	5	2	5	8	2	10	10	6	8	6	7	1
	Females..	71	3	5	3	4	4	4	8	18	9	3	6	4	---
	Unknown	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8-12	Total.....	125	3	10	9	9	6	6	15	28	7	11	12	9	---
	Males.....	59	3	3	5	5	5	3	6	11	4	4	5	5	---
	Females..	65													

DEATHS OF CENTENARIANS.

According to the returns of deaths 8 persons died in Michigan in 1879 who were one hundred years old or over. Of this number five were males and three females. For the year the greatest reported was 107. With the exception of the month of June, and one month unknown, the deaths occurred in those months when the aged have the greatest difficulty in sustaining a proper temperature of the body.

TABLE IX.—Deaths Returned as having occurred in Michigan during the Year 1879 of Persons Aged One hundred Years and Over, Exhibiting certain Details concerning them included in the Returns.

NAMES OF CENTENARIANS, 1879.	Sex.	Color.	Married, Single, or Widowed.	Birthplace.	AGE.			Occupation.	PLACE OF DEATH.		DATE OF DEATH, 1879.		Cause of Death.
					Years.	Months.	Days.		Town.	County.	Month.	Day.	
— Crawford.....	Female..	White..	Widow....	Ireland.....	106	.....	.....	Unknown....	Sault Ste. Marie.....	Chippewa...	October.....	23	Old Age.
Bridget Matrolam....	Female..	White..	Widow....	Ireland.....	100	3	.....	Unknown....	Green.....	Meosta.....	June.....	14	Old Age.
Joseph Guyon.....	Male....	White..	Widower..	Canada.....	105	.....	.....	Farmer.....	Raisinville..	Monroe.....	December...	11	Old Age.
She-an-Se-naw-gua....	Male....	Indian	Single....	Canada.....	100	.....	.....	Unknown....	Brooks.....	Newaygo....	Unknown....	Unk.	Old Age.
Unknown.....	Female..	Indian	Widow....	Unknown....	107	.....	.....	Unknown....	Hart.....	Oceana.....	November..	28	Old Age.
Joseph Gonlette.....	Male....	White..	Widower..	Quebec.....	100	.....	.....	Cooper.....	Elk.....	Sanilac.....	November..	21	Old Age.
William Sanders.....	Male....	White..	Married...	Unknown....	100	.....	.....	Farmer.....	Pittsfield...	Washtenaw.	March.....	19	Old Age.
William Kittle.....	Male....	White..	Widower..	New York....	103	10	.....	Farmer.....	Huron.....	Wayne.....	November..	6	Old Age.

TABLE VI.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

AGES IN YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.												
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
12.....	Total.....	122	9	6	6	7	7	13	6	9	11	20	11	17	-----
	Males.....	57	5	3	2	4	3	8	3	4	4	9	4	8	-----
	Females..	65	4	3	4	3	4	5	3	5	7	11	7	9	-----
13.....	Total.....	106	5	8	8	9	9	6	8	8	11	15	9	10	-----
	Males.....	57	1	3	3	2	6	5	5	6	6	8	7	5	-----
	Females..	49	4	5	5	7	3	1	3	2	5	7	2	5	-----
14.....	Total.....	78	4	3	9	9	7	5	3	5	7	8	6	11	1
	Males.....	27	-----	-----	2	5	2	2	2	-----	3	3	3	4	1
	Females..	51	4	3	7	4	5	3	1	5	4	5	3	7	-----
15.....	Total.....	83	6	8	10	5	4	3	9	8	6	8	10	6	-----
	Males.....	31	2	5	4	-----	2	1	0	4	3	-----	3	1	-----
	Females..	52	4	3	6	5	2	2	3	4	3	8	7	5	-----
16.....	Total.....	96	6	9	6	7	5	8	11	6	10	8	8	12	-----
	Males.....	39	2	5	3	4	-----	5	4	1	4	1	3	7	-----
	Females..	57	4	4	3	3	5	3	7	5	6	7	5	5	-----
17.....	Total.....	129	4	8	14	7	17	8	10	0	14	14	11	16	-----
	Males.....	43	2	3	3	4	6	2	3	2	4	6	3	5	-----
	Females..	86	2	5	11	3	11	6	7	4	10	8	8	11	-----
18.....	Total.....	117	6	9	8	11	10	8	8	15	16	8	6	10	2
	Males.....	42	1	2	2	6	6	4	5	4	4	2	2	4	-----
	Females..	75	5	7	6	5	4	4	3	11	12	6	4	6	2
19.....	Total.....	133	6	9	9	11	11	3	11	7	23	16	11	14	2
	Males.....	65	4	5	3	3	5	1	6	4	15	5	5	8	1
	Females..	68	2	4	6	8	6	2	5	3	8	11	6	6	1
20.....	Total.....	132	4	8	9	9	6	16	15	13	17	6	16	13	-----
	Males.....	58	3	4	6	5	3	6	7	3	8	2	5	6	-----
	Females..	74	1	4	3	4	3	10	8	10	9	4	11	7	-----
21.....	Total.....	129	4	10	12	17	9	12	8	8	8	9	17	15	-----
	Males.....	54	3	3	2	9	3	3	4	4	2	5	7	4	-----
	Females..	75	1	7	10	8	6	4	4	4	6	4	10	11	-----
22.....	Total.....	133	7	7	11	9	9	13	9	13	16	8	11	18	2
	Males.....	64	5	4	4	6	5	4	5	6	8	3	6	8	-----
	Females..	69	2	3	7	3	4	9	4	7	8	5	5	10	2
23.....	Total.....	109	9	6	10	5	8	5	9	9	13	11	13	11	-----
	Males.....	49	8	3	4	3	2	1	2	3	6	7	6	4	-----
	Females..	60	1	3	6	2	6	4	7	6	7	4	7	7	-----

DEATHS—BY AGES, BY SEX, BY MONTHS.

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TABLE VI.—CONTINUED.—Deaths by Ages, by Sex, by Months.

AGES IN YEARS.	SEX.	YEAR. 1879.	MONTHS, 1879.												
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
24	Total.....	138	9	13	11	15	5	12	14	11	9	11	17	11	---
	Males.....	56	3	5	5	3	1	6	5	6	4	4	9	5	---
	Females.....	82	6	8	6	12	4	6	9	5	5	7	8	6	---
25	Total.....	122	6	9	9	8	7	9	13	15	10	13	8	15	---
	Males.....	56	3	6	4	1	4	2	6	4	5	7	6	8	---
	Females.....	66	3	3	5	7	3	7	7	11	5	6	2	7	---
26	Total.....	101	3	9	8	13	8	3	11	8	10	7	11	10	---
	Males.....	36	1	3	1	3	4	---	6	4	2	4	4	3	---
	Females.....	65	2	6	7	10	4	3	5	4	7	3	7	7	---
27	Total.....	113	2	7	4	11	15	9	8	11	12	9	15	9	1
	Males.....	49	1	1	3	5	6	5	3	5	6	3	8	2	1
	Females.....	64	1	6	1	6	9	4	5	6	6	6	7	7	---
28	Total.....	116	9	11	5	8	12	6	12	8	12	9	11	13	---
	Males.....	45	3	4	1	4	4	3	4	4	6	2	5	5	---
	Females.....	71	6	7	4	4	8	3	8	4	6	7	6	8	---
29	Total.....	93	7	3	4	11	7	11	6	10	9	10	9	6	---
	Males.....	31	4	---	2	5	1	4	1	5	3	3	1	2	---
	Females.....	62	3	3	2	6	6	7	5	5	6	7	8	4	---
30	Total.....	110	8	7	10	12	15	4	9	10	7	10	5	13	---
	Males.....	58	4	3	6	8	7	2	6	7	3	4	1	7	---
	Females.....	52	4	4	4	4	8	2	3	3	4	6	4	6	---
31	Total.....	71	6	6	2	2	9	4	4	6	6	6	9	11	---
	Males.....	27	1	4	1	1	2	4	2	3	1	---	4	4	---
	Females.....	44	5	2	1	1	7	---	2	3	5	6	5	7	---
32	Total.....	118	14	9	10	17	5	9	8	6	8	10	8	12	---
	Males.....	53	5	1	5	7	3	5	6	3	3	5	5	5	---
	Females.....	63	9	8	5	10	2	4	2	3	5	5	3	7	---
33	Total.....	90	7	5	8	5	3	6	13	8	4	12	9	10	---
	Males.....	37	5	2	4	1	2	1	6	2	---	5	4	5	---
	Females.....	53	2	3	4	4	1	5	7	6	4	7	5	5	---
34	Total.....	83	6	4	5	5	4	5	12	3	9	8	13	9	---
	Males.....	36	3	1	1	1	1	1	4	2	5	6	6	5	---
	Females.....	47	3	3	4	4	3	4	8	1	4	2	7	4	---
35	Total.....	123	10	12	9	8	8	10	9	16	9	10	10	12	---
	Males.....	54	5	6	5	2	4	5	4	8	3	5	4	3	---
	Females.....	69	5	6	4	6	4	5	5	8	6	5	6	9	---
36	Total.....	110	11	11	4	10	11	11	9	8	8	8	6	13	---
	Males.....	50	5	4	3	5	6	3	5	3	4	3	1	8	---
	Females.....	60	6	7	1	5	5	8	4	5	4	5	5	5	---

TABLE VI.—CONTINUED.—Deaths by Ages, by Sex, by Months.

AGES IN YEARS.		SEX.	YEAR, 1879.	MONTHS, 1879.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
37.....	Total.....	91	6	6	11	6	12	6	13	6	4	7	4	10	---
	Males.....	36	3	3	4	3	5	2	7	1	1	2	1	4	---
	Females..	55	3	3	7	3	7	4	6	5	3	5	3	6	---
38.....	Total.....	100	6	6	8	7	8	5	8	12	8	13	7	12	---
	Males.....	37	4	5	1	---	2	3	3	3	4	5	3	4	---
	Females..	63	2	1	7	7	6	2	5	9	4	8	4	8	---
39.....	Total.....	96	9	3	8	11	5	4	8	8	9	8	13	10	---
	Males.....	45	4	2	4	6	3	3	3	3	2	5	7	3	---
	Females..	51	5	1	4	5	2	1	5	5	7	3	6	7	---
40.....	Total.....	110	9	13	10	6	6	6	3	15	9	11	6	16	---
	Males.....	52	5	6	8	2	3	2	1	8	5	3	3	6	---
	Females..	58	4	7	2	4	3	4	2	7	4	8	3	10	---
41.....	Total.....	62	4	11	6	6	3	4	9	6	---	2	4	7	---
	Males.....	33	3	4	2	3	2	3	4	4	---	---	3	5	---
	Females..	29	1	7	4	3	1	1	5	2	---	2	1	2	---
42.....	Total.....	87	7	5	5	9	13	7	3	9	5	7	6	11	---
	Males.....	50	6	1	3	6	9	6	2	5	1	1	4	6	---
	Females..	37	1	4	2	3	4	1	1	4	4	6	2	5	---
43.....	Total.....	98	7	11	5	16	7	7	3	7	11	7	11	6	---
	Males.....	45	5	6	---	7	3	2	2	3	3	5	6	3	---
	Females..	53	2	5	5	9	4	5	1	4	8	2	5	3	---
44.....	Total.....	56	2	3	4	7	4	3	5	6	3	7	2	10	---
	Males.....	27	---	1	2	6	2	---	4	2	1	2	1	6	---
	Females..	29	2	2	2	1	2	3	1	4	2	5	1	4	---
45.....	Total.....	111	5	9	10	16	10	9	9	17	8	2	11	5	---
	Males.....	54	4	4	5	6	6	2	6	6	4	1	7	3	---
	Females..	57	1	5	5	10	4	7	3	11	4	1	4	2	---
46.....	Total.....	58	5	6	4	3	3	2	2	5	7	12	3	6	---
	Males.....	34	1	5	1	1	1	2	2	1	5	7	3	5	---
	Females..	24	4	1	3	2	2	---	---	4	2	5	---	1	---
47.....	Total.....	62	5	6	5	8	5	2	7	5	3	3	9	4	---
	Males.....	30	3	3	2	3	3	1	3	2	1	2	5	2	---
	Females..	32	2	3	3	5	2	1	4	3	2	1	4	2	---
48.....	Total.....	107	6	8	7	11	8	13	9	10	12	5	8	10	---
	Males.....	66	4	6	3	7	7	11	5	5	5	3	3	7	---
	Females..	41	2	2	4	4	1	2	4	5	7	2	5	3	---
49.....	Total.....	69	5	6	7	6	7	3	7	4	4	8	7	5	---
	Males.....	41	3	5	4	2	4	2	6	---	1	5	6	3	---
	Females..	28	2	1	3	4	3	1	1	4	3	3	1	2	---

DEATHS—BY AGES, BY SEX, BY MONTHS.

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TABLE VI.—CONTINUED.—*Deaths by Ages, by Sex, by Months.*

AGES IN YEARS.	SEX.	YEAR, 1879.	MONTHS, 1879.												
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
50.....	Total.....	98	7	6	6	5	8	6	7	12	14	7	8	12	---
	Males.....	55	3	3	---	1	6	4	4	9	11	4	3	7	---
	Females..	43	4	3	6	4	2	2	3	3	3	3	5	5	---
51.....	Total.....	56	2	2	8	3	7	5	5	8	5	4	3	4	---
	Males.....	32	2	---	6	2	4	4	2	2	4	2	1	3	---
	Females..	24	---	2	2	1	3	1	3	6	1	2	2	1	---
52.....	Total.....	93	8	6	5	10	9	5	9	5	11	7	8	10	---
	Males.....	44	2	2	2	7	6	2	6	3	5	4	3	2	---
	Females..	49	6	4	3	3	3	3	3	2	6	3	5	8	---
53.....	Total.....	65	5	5	2	3	6	8	4	7	7	3	6	9	---
	Males.....	35	2	3	---	1	4	4	3	4	4	2	2	6	---
	Females..	30	3	2	2	2	2	4	1	3	3	1	4	3	---
54.....	Total.....	82	5	8	9	6	4	3	4	8	11	9	9	6	---
	Males.....	53	4	6	2	4	2	2	2	5	8	5	8	5	---
	Females..	29	1	2	7	2	2	1	2	3	3	4	1	1	---
55.....	Total.....	80	5	3	5	7	6	4	5	13	7	4	6	15	---
	Males.....	48	3	2	2	5	2	3	2	9	4	3	3	10	---
	Females..	32	2	1	3	2	4	1	3	4	3	1	3	5	---
56.....	Total.....	90	9	5	5	6	9	5	8	8	7	10	4	14	---
	Males.....	51	5	4	5	4	4	3	2	7	3	7	3	4	---
	Females..	39	4	1	---	2	5	2	6	1	4	3	1	10	---
57.....	Total.....	92	5	8	5	12	10	5	8	10	8	6	8	7	---
	Males.....	52	4	3	3	5	5	3	5	6	2	5	6	5	---
	Females..	40	1	5	2	7	5	2	3	4	6	1	2	2	---
58.....	Total.....	87	7	6	5	9	12	---	5	9	9	3	7	15	---
	Males.....	47	2	3	3	4	6	---	1	7	7	1	5	8	---
	Females..	40	5	3	2	5	6	---	4	2	2	2	2	7	---
59.....	Total.....	88	2	3	5	10	10	10	7	9	7	10	7	8	---
	Males.....	40	---	3	1	6	5	4	4	4	4	7	4	7	---
	Females..	39	2	---	4	4	5	6	3	5	3	3	3	1	---
60.....	Total.....	123	4	6	10	7	13	9	8	13	9	15	17	11	---
	Males.....	76	3	4	4	2	7	7	6	7	5	12	13	5	---
	Females..	47	1	2	6	5	6	2	2	6	4	3	4	6	---
61.....	Total.....	68	2	5	6	6	5	3	6	10	4	6	5	10	---
	Males.....	37	1	3	2	3	3	3	4	4	2	5	3	4	---
	Females..	31	1	2	4	3	2	---	2	6	2	1	2	6	---
62.....	Total.....	76	5	2	7	9	9	5	6	5	7	6	6	9	---
	Males.....	45	3	1	3	4	4	3	3	4	6	4	4	6	---
	Females..	31	2	1	4	5	5	2	3	1	1	2	2	3	---

TABLE X.—CONTINUED.—Deaths by Counties, by Sex, by Months, and by Age, 1879.

COUNTIES.	SEX.	YEAR, 1879.	MONTHS, 1879.												AGES IN PERIODS OF YEARS, 1879.																		
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.
Cass.....	Total.....	178	12	12	15	14	17	11	9	18	27	14	8	21	..	61	13	10	9	9	10	6	6	2	4	1	6	10	6	4	9	5	6
	Males.....	98	8	7	11	8	11	4	5	11	11	9	3	10	..	35	10	5	3	4	3	2	2	1	3	..	5	4	4	4	4	5	5
Charlevoix..	Females..	80	4	5	4	6	6	7	4	7	16	5	5	1	..	26	3	5	6	5	7	4	4	1	1	1	1	6	2	..	..	..	..
	Total.....	40	2	2	..	5	2	2	3	2	5	8	5	4	..	19	4	2	3	1	1	1	2	1	1	..	2	1	1	..	..	..	1
Cheboygan..	Males.....	19	..	1	..	2	..	1	..	1	3	6	3	2	..	11	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Females..	21	2	1	..	3	2	1	3	1	2	2	2	2	..	8	1	2	3	1	1	1	1	1	..	..	..	..	..	..	..	..	..
Chippewa....	Total.....	42	5	3	..	6	3	1	1	6	5	1	5	4	..	19	4	1	..	1	2	1	3	1	2	..	2	2	1	1	1	1	..
	Males.....	23	2	1	..	3	2	..	1	4	2	1	5	2	..	11	..	1	..	1	2	..	1	1	..	..	1	2	1	1	..	..	..
Chippewa....	Females..	19	3	2	..	3	1	1	..	2	3	..	..	..	..	8	4	..	..	..	..	1	2	..	2	..	1	..	..	..	..	..	..
	Total.....	62	1	1	6	5	2	..	6	10	4	3	7	7	..	21	2	1	5	1	1	2	..	4	3	1	3	3	..	..	..	..	..
Chippewa....	Males.....	24	1	..	4	3	1	..	2	3	2	1	2	5	..	12	..	..	..	..	..	..	..	2	1	1	3	2	..	..	..	..	..
	Females..	27	..	1	2	2	1	..	4	7	2	1	5	2	..	8	2	1	5	1	1	1	..	2	2	..	..	..	..	1	1	..	..
Clare.....	Unknown	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total.....	80	2	2	1	3	4	1	4	4	2	3	2	2	..	9	3	2	1	..	2	..	1	2	2	1	..	1	2	..	..	..	1
Clare.....	Males.....	11	1	..	..	1	2	..	1	2	1	1	1	1	..	4	1	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
	Females..	19	..	2	1	2	2	1	3	2	1	2	1	1	2	5	2	..	1	1	1	2	1

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

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	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2
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TABLE VIII.—Exhibiting, by Sex, the Number of Children under One Year of Age Returned as having Died in Michigan during the Year 1879; distinguishing the Months in which they Died, their Age in Months at Death, the Months in which they were Born, and whether Born in the Year of Death or in the Previous Year.*

Months in which Births and Deaths Occurred.	NUMBER BORN IN EACH MONTH OF YEAR OF DEATH.			NUMBER OF CHILDREN WHO DIED AT EACH AGE IN MONTHS.													NUMBER BORN IN EACH MONTH OF YEAR PREVIOUS TO YEAR OF DEATH.			DEATHS BY MONTHS.			ALL AGED UP-DEE ONE YEAR.	
	Total.	Sex.	No. of each Sex.	-1.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Total.	Sex.	No. of each Sex.	Total.	Sex.	Total.	Sex.		Total.
				Males...	Females...	Males...	Females...	Males...	Females...	Males...	Females...	Males...	Females...	Males...	Females...									
January.....	235	Males... Females...	142 113	66 40	9 3	5 4	4 9	4 4	4 4	3 3	3 3	3 3	6 1	2 2	5 1	106	68 40	47 30	77	113 70	183	133		
February.....	296	Males... Females...	171 125	73 48	11 9	5 4	5 5	5 3	8 6	5 5	5 7	3 3	4 5	6 4	5 1	141	84 57	51 47	101	138 104	242	188		
March.....	316	Males... Females...	179 137	90 89	25 10	8 8	7 10	1 3	11 5	2 3	5 4	3 3	5 5	3 3	11 6	125	125 82	63 30	102	183 121	309	283		
April.....	310	Males... Females...	170 140	81 57	17 14	8 7	8 7	5 5	5 4	7 5	5 4	4 5	1 1	4 4	23 11	207	115 92	41 35	76	156 137	293	245		
May.....	246	Males... Females...	144 102	74 47	18 15	5 6	11 10	3 5	3 4	2 7	5 4	1 1	5 1	2 1	12 12	194	111 83	29 22	51	140 105	245	215		
June.....	246	Males... Females...	137 109	73 47	8 7	5 9	3 3	5 5	5 5	2 6	4 4	3 5	2 2	4 4	19 14	176	100 76	15 24	39	115 100	215	215		
July.....	231	Males... Females...	137 94	71 55	15 13	20 11	11 16	13 9	8 7	13 10	6 8	8 5	2 3	9 3	20 22	278	151 127	33 26	64	189 153	342	342		
August.....	211	Males... Females...	132 79	83 54	20 14	11 14	16 22	23 19	20 18	10 9	11 17	16 7	8 10	9 12	22 32	244	205 168	44 46	90	249 214	463	463		
September.....	232	Males... Females...	133 94	98 57	20 19	12 10	12 10	16 12	6 7	4 3	15 7	8 9	7 9	8 9	60 39	299	197 113	30 19	48	227 131	359	359		
October.....	172	Males... Females...	106 66	82 55	12 9	16 6	12 8	5 5	6 4	8 4	3 3	7 5	1 1	3 3	62 51	287	171 116	8 4	12	179 130	229	229		
November.....	146	Males... Females...	83 63	69 60	6 6	14 15	4 3	6 3	2 8	4 3	6 6	5 7	1 1	4 4	67 51	239	126 113	4 4	8	130 117	247	247		
December.....	138	Males... Females...	101 87	101 87	14 3	18 5	14 8	8 6	9 8	6 6	7 4	5 4	2 2	2 2	77 60	143	189 112	.....	.....	189 112	331	331
1879.																								
1878.																								
1877.																								

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE. 1

Males.....	106	5	11	12	8	9	8	7	10	15	5	8	10	23	67	18	16	5	4	9	5	11	5	7	6	9111208611						
	Females..	98	4	5	5	5	9	2	4	17	15	11	8	13	34	5	9	5	1	3	3	7	4	3	1	535523						
Total.....	58	9	4	5	1	3	1	5	11	5	4	6	4	25	9	1	5	1	5	2	1	2	2	1	2	1						
Males.....	34	6	4	1	1	1	1	3	8	3	1	3	2	15	5	1	2	1	4	1	1	1	1	1	2	1						
Females..	24	3	....	4	....	2	....	2	3	2	3	3	2	10	4	....	3	....	1	1	1	1	1	1	1	1	
Total.....	98	4	2	5	6	7	8	6	11	9	14	10	16	44	9	6	7	2	7	3	1	2	2	1	2	1						
Males.....	43	2	2	5	3	3	4	1	2	4	11	3	8	22	6	3	3	1	1	1	1	1	1	1	1	1						
Females..	49	2	....	....	....	3	3	5	9	5	2	7	8	22	3	3	4	1	0	2	....	2	1	....	1	1	
Unknown	2	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	2
Iale Royal.....	337	26	17	21	33	19	24	32	36	28	29	26	33	118	19	7	9	14	13	14	17	16	4	10	1014171412261							
Males.....	168	20	10	13	10	8	5	15	13	12	19	11	26	66	11	7	....	4	7	6	9	8	1	6	4	711155101					
Females..	169	6	7	8	22	11	19	17	26	16	10	13	12	52	8	9	10	8	8	8	3	4	6	7	6	9	7	16		
Total.....	363	33	25	26	39	26	7	41	41	42	29	26	29	1	93	10	13	11	14	16	1	18	10	16	18	11	18	22	21	18	20	8
Males.....	178	11	13	19	21	17	2	18	21	16	15	11	14	43	9	7	4	7	4	9	9	4	9	10	7	7	17	11	9	8	4	
Females..	184	21	12	7	17	9	5	22	20	26	14	15	15	1	47	10	6	7	7	12	10	9	6	7	8	4	11	5	10	9	12	4
Unknown	3	1	1	1	3
Total.....	17	1	3	1	3	4	1	1	3	9	1	2	1	1
Males.....	6	1	1	1	2	1	3	1
Females..	11	2	1	2	2	1	3	6	1
Total.....	796	30	30	41	54	47	47	68	102	85	87	91	102	309	53	29	24	34	29	23	31	26	22	25	26	18	21	27	24	33	3	8
Males.....	428	18	19	21	26	25	26	36	62	53	47	44	42	172	49	20	11	14	13	15	13	9	14	9	18	12	14	17	11	15	2	2
Females..	368	12	20	20	28	19	22	32	40	32	40	47	53	137	39	19	13	20	10	8	18	11	8	16	8	6	7	10	13	18	1	1

No returns from the county clerk to the State Department.

EXHIBIT 3.—Of the Children Born in 1878, the Number who Died during the Year 1878; the Number who Died during the Year 1879, under One Year of Age; The Total Number who Died under One Year of Age; and the Per Cent. of Decedents Aged under One Year to the Children Born in 1878.

MONTHS OF BIRTH AND OF DEATH.	CHILDREN BORN IN 1878.					MALES BORN IN 1878.					FEMALES BORN IN 1878.				
	Births in 1878, as Returned.	Died during the Year 1878.	Died Aged under 1 Year during the Year 1879.	Total Died Aged under 1 Year. 1878.	Per Cent. of Deaths under 1 to Births.	Births of Males in 1878, as Returned.	Died during the Year 1878.	Died Aged under 1 Year during the Year 1879.	Total Died Aged under 1 Year. 1878.	Per Cent. of Deaths under 1 to Births.	Births of Females in 1878, as Returned.	Died during the Year 1878.	Died Aged under 1 Year during the Year 1879.	Total Died Aged under 1 Year. 1878.	Per Cent. of Deaths under 1 to Births.
Total.....	25,120	2,637	668	3,305	9.41	18,204	1,481	273	1,854	10.13	16,800	1,156	295	1,451	8.61
January.....	2,201	223	-----	228	10.13	1,180	130	-----	130	11.02	1,012	93	-----	93	9.19
February.....	2,414	231	6	237	9.82	1,253	119	5	124	9.85	1,150	112	1	113	9.83
March.....	2,886	250	12	262	9.24	1,444	123	6	129	8.93	1,390	127	6	133	9.57
April.....	2,937	269	34	303	10.32	1,538	150	23	173	11.25	1,391	119	11	130	9.35
May.....	2,805	242	24	266	9.43	1,400	130	12	142	10.14	1,400	112	12	124	8.86
June.....	2,707	228	33	261	9.33	1,472	129	19	148	10.05	1,323	99	14	113	8.54
July.....	2,335	236	42	278	9.81	1,462	140	20	160	10.94	1,370	96	22	118	8.61
August.....	3,295	286	44	290	8.60	1,721	128	22	150	8.72	1,570	108	23	130	8.28
September.....	3,260	199	90	298	9.14	1,733	121	60	181	10.44	1,523	78	80	117	7.69
October.....	3,266	171	113	284	8.70	1,712	103	62	165	9.64	1,546	63	51	119	7.70
November.....	3,061	160	118	278	9.08	1,629	95	67	162	10.60	1,527	65	51	116	7.60
December.....	3,428	192	143	335	9.79	1,754	113	77	190	10.83	1,639	79	66	145	8.74

* Excluding 32 in unknown month,—20 males, 11 females, and 1 unknown sex.

DEATHS—INFANT MORTALITY.

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MONTHS OF BIRTH, 1878.		MONTHS OF DEATH, 1878.												MONTHS OF DEATH, 1879.												Per Cent. of Children who Died aged un- der 1 month in 1878, as Re- turned.	Per Cent. of Children who Died aged un- der 1 month to all Chil- dren born.
Born in 1878 Year of Age.	Died under Age.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.		
3,305	233	103	119	161	179	165	188	243	302	293	260	225	334	77	101	102	76	51	39	64	90	48	12	8		35,130	4.68
237		108	23	11	6	14	22	12	7	9	6			6												2,201	4.47
262			127	7	13	14	19	23	16	11	12	8	4	8												2,414	4.48
303					150	16	17	21	24	15	11	5	10	7	11	16										2,836	5.11
266						127	13	25	33	22	7	7	8	3	7	8	6									2,805	4.53
261								114	15	41	24	19	10	9	5	10	8	2								2,797	4.08
278									132	43	27	16	12	6	6	10	9	7	5	5						2,835	4.66
280										157	21	21	21	16	4	10	5	9	8	3	5					3,295	4.76
293											145	25	12	17	8	14	16	9	6	11	14	21				3,260	4.45
284												135	19	17	13	8	14	12	12	6	13	18	17			3,266	4.13
278													124	36	9	14	8	10	12	6	14	23	14	8		3,091	4.05
335														192	12	9	18	15	6	8	18	28	17	4	8	3,423	5.61
3,305														1614	241	213	207	165	134	146	120	125	130	99	111	48.83	4.59
Deaths at each Age.		Deaths at each Age.																									
17a—1879.																											

* That is, per cent. of children who died during month of birth to total born in 1878 who died aged under one year.

^b Excluding 32 in unknown month, —20 males, 11 females, and 1 of unknown sex.

^e That is, of the children born in 1878, the per cent. who died during month of birth,—according to the returns of births and of deaths. It should be borne in mind that probably a larger proportion of the births and of the deaths are returned for the latter months of the year.

THESE FOLIOES CONTAIN THE ORIGINALS OF THE PAPERS OF THE

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17a—1879.

RELATIONS OF DEATHS OF CHILDREN TO BIRTHS, BY MONTHS.

The per cent. of deaths under the age of one month to births in 1879, without, and with regard to sex, is given in Exhibit 5. The per cent. of males is seen to be greater than that of females. This condition might be expected, and accords with extended observation. Not only is the proportion of males born to females greater, but structural conditions at birth are in favor of the female, and the more vigorous male infant, demanding a larger supply of nourishment, is more likely to be deprived of the proper quantity to sustain life than is the less vigorous of the other sex.

EXHIBIT 5.—*The Relation, by Months, by Total, and by Sex, of the Decedents Aged under One Month to the Births in Michigan during the Year ending December 31, 1879.*

SEX, ETC., SPECIFIED.	YEAR, 1879.	MONTHS, 1879.												
		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Total.....	34,122	2,429	2,331	2,768	2,706	2,842	2,626	3,018	3,198	3,149	3,036	2,766	3,233	39
	Deaths aged under one month.....	169	123	156	140	124	123	129	140	157	140	131	190	3
	Per Cent. of Deaths to Births.....	4.88	4.49	5.66	5.17	4.36	4.68	4.27	4.38	4.99	4.61	4.74	5.88	10.00
Males.....	17,757	1,250	1,195	1,469	1,406	1,569	1,331	1,546	1,664	1,686	1,601	1,448	1,701	11
	Deaths aged under one month.....	66	73	90	81	74	73	71	83	93	82	69	101	1
	Per Cent. of Deaths to Births.....	5.42	6.11	6.39	5.76	4.90	5.48	4.59	4.99	5.81	5.12	4.77	5.94	9.09
Females.....	16,317	1,174	1,133	1,347	1,297	1,329	1,291	1,467	1,530	1,460	1,431	1,314	1,529	15
	Deaths aged under one month.....	40	48	65	57	47	47	55	54	67	55	69	87	2
	Per Cent. of Deaths to Births.....	4.13	4.24	4.83	4.39	3.54	3.64	3.75	3.53	3.90	3.84	4.57	5.69	13.33
Unknown.....	48	5	3	2	3	4	4	5	4	3	4	4	3	4
	Deaths aged under one month.....	29	3	1	2	3	3	3	3	2	3	2	2	.....

* Still-births included.

DEATHS OF CENTENARIANS.

According to the returns of deaths 8 persons died in Michigan in 1879 who were one hundred years old or over. Of this number five were males and three females. For the year the greatest reported was 107. With the exception of the month of June, and one month unknown, the deaths occurred in those months when the aged have the greatest difficulty in sustaining a proper temperature of the body.

TABLE IX.—Deaths Returned as having occurred in Michigan during the Year 1879 of Persons Aged One hundred Years and Over, Exhibiting certain Details concerning them included in the Returns.

NAMES OF CENTENARIANS, 1879.	SEX.	Color.	Married, Single, or Widowed.	Birthplace.	AGE.			Occupation.	PLACE OF DEATH.		DATE OF DEATH, 1879.		Cause of Death.
					Years.	Months.	Days.		Town.	County.	Month.	Day.	
— Crawford.....	Female..	White..	Widow....	Ireland.....	106	....	....	Unknown...	Sault Ste. Marie	Chippewa...	October	23	Old Age.
Bridget Matrolam	Female..	White..	Widow....	Ireland.....	106	3	....	Unknown...	Green	Meosta.....	June	14	Old Age.
Joseph Guyon.....	Male....	White..	Widower..	Canada.....	105	....	....	Farmer.....	Raisinville..	Monroe.....	December...	11	Old Age.
She-an-Se-naw-qua.....	Male....	Indian	Single....	Canada.....	106	....	....	Unknown...	Brooks	Newaygo....	Unknown...	Unk.	Old Age.
Unknown.....	Female..	Indian	Widow....	Unknown....	107	....	....	Unknown...	Hart.....	Oceana.....	November ..	26	Old Age.
Joseph Gonlette.....	Male....	White..	Widower..	Quebec.....	106	....	....	Cooper	Elk.....	Sanilac.....	November ..	21	Old Age.
William Sanders	Male....	White..	Married...	Unknown....	106	....	....	Farmer.....	Pittsfield ...	Washtenaw.	March.....	19	Old Age.
William Kittle	Male....	White..	Widower..	New York....	103	10	Farmer.....	Huron.....	Wayne.....	November ..	6	Old Age.

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

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[illegible]

TABLE X.—CONTINUED.—Deaths by Counties, by Sex, by Months, and by Age, 1879.

COUNTIES.	SEX.	YEAR, 1879.	MONTHS, 1879.												AGES IN PERIODS OF YEARS, 1879.																					
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.				
Cass.....	Total.....	178	12	12	15	14	17	11	9	18	27	14	8	21	..	61	13	10	9	9	10		6	2	4	1	6	10	6	4	9	7	5			
	Males.....	98	8	7	11	8	11	4	5	11	1	9	3	10	..	35	10	5	3	4	3		2	1	3	..	5	4	4	4	4	5				
	Females..	80	4	5	4	6	6	7	4	7	7	16	5	5	1	..	26	3	5	6	5	7	4	4	1	1	1	6	2	..	5	2				
Charlevoix..	Total.....	40	2	2	..	5	2	2	3	2	5	8	5	4	..	19	4	2	3	1	1		2	1	1	..	2	1	1	..	..	..	1	
	Males.....	19	..	1	..	2	..	1	..	1	3	6	3	2	..	11	3	..	..	..	..		1	..	1	..	..	1	1	..	..	..	1	
	Females..	21	2	1	..	3	2	1	3	1	2	2	2	2	..	8	1	2	3	1	1		1	1	..	..	2	..	..	..	..	..	..
Cheboygan..	Total.....	42	0	3	..	8	3	1	1	6	5	1	5	4	..	19	4	1	..	1	2		2	1	2	..	2	1	2	1	1	1	1			
	Males.....	23	2	1	..	3	2	..	1	4	2	1	5	2	..	11	..	1	..	1	2		1	1	..	..	1	2	1	1	1	1	1	
	Females..	19	2	2	..	5	1	1	..	2	3	..	..	2	..	8	4	..	..	..	..		2	..	2	..	1	..	..	..	..	..	..
Chippewa....	Total.....	52	1	1	6	5	2	..	6	10	4	3	7	7	..	21	2	1	5	1	1	2	4	2	1	2	1	2	..	..	..	..	..
	Males.....	54	1	..	4	3	1	..	2	5	2	1	2	5	..	12	..	..	..	..	..		..	2	1	1	3	..	..	..	..	..	..
	Females..	27	..	1	2	2	..	..	4	7	2	1	5	2	..	9	2	1	5	1	1		..	2	2	..	..	..	1	1	1	1	2	
Clare.....	Unknown	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..
	Total.....	30	1	2	1	3	4	1	4	4	2	3	2	2	..	9	3	2	1	..	2		1	2	2	1	..	1	2	1	2	1	1	1		
Clare.....	Males.....	11	1	1	2	..	1	2	1	1	1	4	1	2	1	1	1	
	Females..	19	..	2	1	2	2	1	3	2	1	2	1	1	..	5	2	1	2		1	1	2	1	2	1	1	1	1	1		

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

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	Total.....	213	10	13	14	20	20	14	22	23	18	9	18	29	4	81	13	C	5	9	6	10	7	5	7	9	9	611	7	611	5		
Clinton.....	Males.....	98	6	10	8	9	6	10	6	9	4	9	10	8	41	3	2	---	4	2	2	3	3	4	3	6	4	3	6	4	4		
	Females..	113	3	6	17	11	7	12	17	9	5	9	10	1	33	10	4	5	5	4	8	4	2	3	6	3	2	6	1	4	4		
	Unknown	2	1	---	---	---	---	1	---	---	---	---	---	---	---	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Crawford.....	Total.....	7	---	---	1	2	---	2	---	1	---	---	---	1	---	5	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
	Males	5	---	---	2	---	---	2	---	---	---	---	---	1	---	3	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---		
	Females .	2	---	---	1	---	---	---	---	1	---	---	---	---	---	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Delta.....	Total.....	30	4	1	1	---	1	3	5	6	1	---	5	3	---	20	1	---	1	---	1	1	1	1	1	1	1	1	---	1	---		
	Males	16	1	---	---	---	1	1	3	4	1	---	3	2	---	10	1	---	---	---	---	---	---	1	1	1	---	---	---	---	---	---	
	Females..	14	3	1	1	---	---	2	2	2	2	---	2	1	---	10	---	---	1	---	---	1	---	---	---	---	1	---	---	---	---	---	
Eaton.....	Total.....	312	23	32	19	26	27	19	25	24	32	32	18	25	---	118	13	8	14	18	13	9	12	10	6	9	8	10	23	14	15	9	3
	Males	153	14	19	9	9	12	10	18	14	14	18	9	7	---	64	5	4	5	3	3	4	3	5	4	6	4	8	13	8	7	6	---
	Females..	159	19	13	10	17	15	9	7	10	18	14	9	18	---	54	8	4	9	15	10	5	9	5	2	3	4	2	10	6	8	3	2
Ennet.....	Total.....	64	5	7	4	5	8	4	1	10	4	4	7	5	---	32	2	3	6	3	1	5	---	1	1	---	1	2	---	2	---	1	4
	Males	32	3	5	2	3	3	3	1	5	3	1	2	1	---	16	---	3	4	---	1	3	---	1	1	---	---	---	---	---	---	3	
	Females..	32	2	2	2	5	5	1	---	5	1	3	5	4	---	16	2	---	2	3	---	2	---	---	---	---	---	1	2	---	2	---	1	1
Gencsee.....	Total.....	278	19	31	15	23	23	12	18	42	26	19	23	22	---	93	17	8	14	19	10	11	8	6	8	8	9	10	12	14	10	16	5
	Males	137	12	11	7	9	12	9	10	20	13	10	10	14	---	55	11	4	7	7	1	3	2	1	2	5	5	6	9	4	3	10	2
	Females..	140	7	20	8	19	11	3	8	22	13	9	12	8	---	37	6	4	7	12	9	8	6	5	6	3	4	4	3	10	7	6	3
Gladwin.....	Total.....	8	---	---	1	3	3	---	---	---	1	---	---	---	---	2	3	2	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	Males	5	---	---	1	1	2	---	---	---	1	---	---	---	---	2	1	1	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	Females..	3	---	---	---	2	1	---	---	---	---	---	---	---	---	---	2	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE X.—CONTINUED.—Deaths by Counties, by Sex, by Months, and by Age, 1879.

COUNTIES.	SEX.	YEAR, 1879.	MONTHS, 1879.												AGES IN PERIODS OF YEARS, 1879.																			
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
Gr. Traverse	Total.....	60	3	4	3	6	3	7	6	11	5	6	4	2	..	32	4	1	1	1	3	..	2	2	4	1	1	..	3	2	1	2	..	
	Males.....	26	2	3	1	4	1	2	1	4	4	1	2	1	..	14	2	..	..	1	2	..	1	..	2	1	..	..	1	1	1	..	..
	Females..	34	1	1	2	2	2	5	5	7	1	5	2	1	..	18	2	1	1	..	1	..	1	2	..	..	1	2	1	..	..	..	..
Gratiot.....	Total.....	170	4	10	15	13	15	13	8	22	20	27	6	17	..	78	17	11	8	5	9	3	3	5	2	..	..	3	7	6	1	3	9	..
	Males.....	100	2	5	9	6	10	8	6	13	12	17	4	8	..	49	14	5	2	2	6	2	..	1	..	..	..	2	4	3	1	3	6	..
	Females..	70	2	5	6	7	5	5	2	9	8	10	2	9	..	29	3	6	6	3	3	1	3	4	2	..	..	1	3	..	..	..	..	..
Hillsdale.....	Total.....	251	11	21	15	21	16	14	19	19	26	31	23	33	2	65	17	11	8	13	11	10	15	8	15	6	8	12	16	9	6	17	4	
	Males.....	112	3	7	6	12	8	8	8	7	11	16	11	14	2	28	9	5	4	4	2	3	3	3	3	1	5	8	7	7	8	12	2	
	Females..	136	8	13	10	9	8	6	10	12	14	15	12	19	..	35	8	6	4	9	9	7	12	5	7	5	3	4	9	2	3	5	2	
	Unknown	3	1	..	..	..	..	..	1	..	1	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Houghton.....	Total.....	224	11	8	19	22	19	16	26	23	15	17	15	33	..	131	11	6	7	4	5	7	9	12	7	4	7	2	5	2	1	1	3	..
	Males.....	122	6	4	10	11	12	9	14	13	9	9	10	15	..	70	5	4	2	2	4	3	1	9	4	4	6	2	3	..	1	..	2	..
	Females..	102	5	4	9	11	7	7	12	10	6	8	5	18	..	61	6	2	5	2	1	4	8	3	3	..	..	1	2	2	..	1	1	..
Huron.....	Total.....	99	5	15	2	5	9	12	3	14	5	9	8	12	..	49	5	3	4	2	7	3	2	3	4	1	6	1	..	1	2	4	2	..
	Males.....	57	2	7	1	3	2	4	1	10	3	6	7	7	..	31	4	1	2	1	1	2	2	..	2	1	4	1	..	1	1	3	..	
	Females..	42	3	8	1	2	7	4	2	4	2	3	1	5	..	18	1	2	2	1	0	1	..	3	2	..	2	..	..	..	..	1	2	..
Ingham.....	Total.....	238	16	17	20	18	12	17	30	30	30	39	37	32	..	106	30	17	20	11	11	9	10	5	6	3	15	7	12	7	12	5	2	..
	Males.....	155	11	7	12	9	9	7	10	12	17	21	22	18	..	65	14	7	11	3	5	1	5	3	4	2	10	2	8	6	6	2	2	..
	Females..	133	5	10	8	9	3	10	10	18	13	18	15	14	..	41	16	10	9	8	6	8	5	2	2	1	5	5	4	2	6	3

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

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County	Sex	Month												Age											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1	2	3	4	5	6	7	8	9	10	11	12
Ionia	Total	108	6	11	12	8	9	8	7	10	15	5	8	10	23	67	13	18	8	4	9	5	1	5	7
	Males	108	6	11	12	8	9	8	7	10	15	5	8	10	23	67	13	18	8	4	9	5	1	5	7
	Females	98	4	5	5	5	9	2	4	17	15	11	8	13	34	5	9	5	1	3	7	4	3	1	6
Iosco	Total	58	9	4	5	1	3	1	5	11	5	4	6	4	25	9	1	5	1	5	2	1	2	2	2
	Males	34	6	4	1	1	1	1	3	8	3	1	3	2	15	5	1	2	1	4	1	1	1	1	1
	Females	24	3	3	4	4	2	2	2	3	2	3	3	2	10	4	3	3	1	1	1	1	1	1	1
Isabella	Total	98	4	2	5	6	7	8	6	11	9	14	10	16	44	9	6	7	2	7	3	1	2	2	1
	Males	43	2	2	5	3	3	4	1	2	4	11	3	8	22	6	3	3	1	1	1	1	1	1	1
	Females	48	2	3	3	3	3	3	5	9	5	3	7	8	22	3	3	4	1	6	2	2	1	1	1
Isle Royal	Total	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Males	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Females	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Jackson	Total	337	26	17	21	38	19	24	32	39	28	29	26	38	118	19	7	9	14	13	14	17	16	4	10
	Males	168	20	10	13	16	8	5	15	13	12	19	11	26	66	11	7	4	7	6	9	8	1	6	4
	Females	169	6	7	8	22	11	19	17	26	16	10	15	12	52	8	2	5	7	7	5	9	5	3	6
Kalamazoo	Total	365	33	25	26	29	26	7	41	41	42	29	26	29	1	93	19	13	11	14	16	18	10	16	18
	Males	178	11	13	19	21	17	2	38	21	16	15	11	14	43	9	7	4	7	4	9	9	4	9	10
	Females	184	21	12	7	17	9	5	22	20	26	14	15	15	1	47	10	6	7	7	7	8	6	7	8
Kalkaska	Total	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Males	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Females	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Kent	Total	796	30	39	41	54	47	47	68	102	88	87	91	102	369	58	39	24	34	29	23	31	26	22	25
	Males	428	18	19	21	26	28	25	36	62	53	47	44	49	172	40	20	11	14	13	15	13	9	14	9
	Females	368	12	20	20	28	19	22	32	40	35	40	47	53	197	18	19	13	20	16	8	18	11	8	16

* No returns from the county clerk to the State Department.

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

Livingston.....	Total.....	176	16	14	11	9	10	10	10	10	10	11	10	10	15	7	5	7	12	4	7	8	4	7	9	10	2
	Males.....	84	6	7	3	4	8	2	14	4	8	9	9	10	25	5	2	-	4	3	1	5	3	2	5	6	1
	Females..	92	4	7	8	4	11	8	5	6	11	5	13	10	20	10	5	5	3	9	3	2	5	2	6	4	2
Mackinac.....	Total.....	22	4	3	1	1	--	--	3	1	4	2	3	--	4	--	2	1	4	--	2	2	1	2	1	--	1
	Males.....	10	--	2	--	1	--	1	--	3	1	2	--	--	2	--	1	1	--	--	1	--	2	1	--	1	
	Females..	12	4	1	1	--	--	2	1	1	1	1	1	--	2	--	1	--	4	--	1	2	1	--	--	1	
Macomb.....	Total.....	308	19	17	31	16	27	23	23	43	31	25	24	--	101	18	17	10	12	16	7	9	7	1	6	16	
	Males.....	158	13	8	15	7	15	15	6	16	17	18	15	13	54	10	9	2	5	5	9	1	4	4	6	7	
	Females..	150	6	9	16	9	12	8	17	13	26	13	10	11	47	8	8	12	7	7	6	5	3	5	-	9	
Manistee.....	Total.....	119	10	10	12	6	8	5	14	11	8	10	10	1	70	8	3	2	4	5	2	6	1	4	-	3	
	Males.....	71	8	5	7	4	3	3	9	7	7	2	7	8	44	6	2	-	2	3	-	2	1	4	-	2	
	Females..	47	2	5	5	2	5	2	4	7	4	6	3	2	25	2	1	2	2	2	2	4	-	-	-	1	
	Unknown	1	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	
Manitou.....	Total.....	6	--	--	--	--	--	--	3	1	2	--	--	--	2	--	1	--	1	--	--	--	--	--	--	1	
	Males.....	3	--	--	--	--	--	--	1	--	2	--	--	--	1	--	--	--	1	--	--	--	--	--	--	1	
	Females..	3	--	--	--	--	--	--	2	1	--	--	--	--	1	--	1	--	--	--	--	--	--	--	--	1	
Marquette.....	Total.....	217	19	17	19	25	13	19	15	16	21	13	21	19	120	12	9	5	10	4	9	6	8	4	6	6	
	Males.....	127	13	11	6	13	8	12	12	10	11	10	9	12	67	6	5	6	1	6	5	5	4	3	3	4	
	Females..	90	6	6	13	12	5	7	3	6	10	3	12	7	53	6	3	-	4	3	3	1	3	-	3	2	
Mason.....	Total.....	87	3	4	3	12	11	10	3	4	11	8	9	9	50	12	5	1	1	1	3	2	-	2	-	1	
	Males.....	55	3	4	1	3	6	8	2	2	8	5	5	6	32	7	1	1	--	--	3	1	-	2	-	2	
	Females..	32	--	--	2	9	3	2	1	2	3	3	4	3	18	5	4	-	1	1	-	-	-	-	-	1	

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

[illegible]

DEATHS—BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

	1890	0	12	20	31	18	6	15	26	19	14	13	101	6	11	27	10	1	9	5	5	5	4	4	4	9	6	1
Total.....	103	4	6	12	19	11	3	6	11	7	10	8	6	2	7	1	2	1	3	3	3	3	3	3	3	3	3	3
Males.....	96	1	6	8	12	7	3	9	15	12	10	6	7	3	4	1	8	1	3	3	3	3	3	3	3	3	3	3
Females..	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Total.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Males.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females..	165	7	13	9	11	13	14	21	20	11	8	24	38	8	7	8	15	6	4	8	5	5	5	5	5	5	5	5
Total.....	86	3	4	7	6	5	6	6	13	12	6	4	14	3	4	7	1	1	5	3	3	3	3	3	3	3	3	3
Males.....	77	4	9	2	5	7	7	8	8	5	4	10	22	4	4	8	5	3	3	3	3	3	3	3	3	3	3	3
Females..	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Unknown	368	23	38	25	22	23	25	43	52	29	24	32	3	150	30	14	15	28	13	6	12	8	12	9	7	12	4	1
Total.....	206	15	20	15	14	16	17	18	33	19	11	11	16	1	8	17	5	6	7	3	4	8	6	9	3	8	3	9
Males.....	161	8	18	9	8	7	8	25	19	10	18	13	16	2	60	13	9	10	15	6	3	8	4	2	3	6	4	1
Females..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Unknown	55	13	13	27	22	22	15	14	28	20	31	25	24	60	19	7	7	12	10	11	12	7	3	10	14	13	20	1
Total.....	115	6	4	9	13	11	6	9	9	10	14	13	11	40	2	1	5	3	2	6	3	2	4	6	6	13	6	6
Males.....	138	6	9	18	9	11	9	5	19	9	17	13	13	27	17	6	7	7	9	6	4	1	6	8	7	7	5	7
Females..	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Unknown	258	13	24	18	18	19	14	10	20	27	31	21	13	108	29	8	8	12	6	4	5	10	2	4	4	1	6	8
Total.....	130	11	18	13	6	8	6	7	6	14	16	9	6	64	13	4	3	5	3	2	4	1	1	1	1	4	5	3
Males.....	108	2	6	5	12	11	8	3	14	13	15	12	7	44	16	4	5	7	3	2	6	6	1	3	3	1	1	3
Females..	247	13	21	18	23	17	15	14	25	23	21	27	30	88	13	8	5	14	9	13	10	12	10	4	8	8	14	1
Total.....	150	7	12	10	10	7	6	5	14	12	9	12	16	43	9	4	1	3	4	5	3	7	5	2	2	6	7	9
Males.....	127	6	9	8	13	10	9	9	11	11	12	15	14	45	4	4	5	11	5	8	7	5	5	2	2	6	7	3
Females..																												

19—1879.

TABLE XI.—Deaths in Michigan during the Year 1879, distinguishing the Color by Number and Proportion of each Sex; and, by Sex, the Per Cent. of Decedents of each Color to Total of All Colors.

COLOR.	SEX.	Deaths Returned, 1879.	Per Cent. of Deaths of Each Sex to Total of Both Sexes.	Males to 100 Females.	Per Cent. of Deaths of each Color to Total of All Colors, by Sex.
All Colors.	Total.....	14,407			100.00
	Males.....	7,522	52.35	109.84	100.00
	Females.....	6,848	47.65		100.00
	Unknown.....	37			100.00
White.	Total.....	14,097			97.85
	Males.....	7,387	52.49	110.50	98.21
	Females.....	6,685	47.51		97.62
	Unknown.....	25			67.57
Black.	Total.....	117			.81
	Males.....	50	42.74	74.63	.66
	Females.....	67	57.26		.98
Mulatto.	Total.....	23			.16
	Males.....	13	56.52	130.00	.17
	Females.....	10	43.48		.15
Indian.	Total.....	99			.69
	Males.....	41	41.41	70.69	.55
	Females.....	58	58.59		.85
Unknown.	Total.....	71			.49
	Males.....	31	52.54	110.71	.41
	Females.....	28	47.46		.41
	Unknown.....	12			32.43
Black and Mulatto.	Total.....	140			.97
	Males.....	63	45.00	81.82	.84
	Females.....	77	55.00		1.12

TABLE XII.—*Exhibiting, by Number and by Sex, for the State and Counties, the Color of All Persons Returned as having Died in Michigan during the Year ending December 31, 1879.*

STATE AND COUNTIES.	ALL COLORS,—1879.				WHITE.				BLACK.			MU- LATTO.			INDIAN.			UNKNOWN.				
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Unknown.	
State	14,407	7,522	6,848	87	14,097	7,387	6,685	25	117	50	67	23	13	10	6	99	41	58	71	31	28	12
Alcona	27	16	11	—	27	16	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Allegan	322	173	149	—	322	173	149	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alpena	63	36	27	—	63	36	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Antrim	43	26	17	—	42	25	17	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—
Baraga	20	13	7	—	11	9	2	—	—	—	—	—	—	—	—	6	9	4	5	—	—	—
Barry	168	94	74	—	168	94	74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bay	353	176	187	—	350	170	180	—	—	—	—	—	—	—	—	13	6	7	—	—	—	—
Benzie	32	20	11	1	31	20	11	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Berrien	344	187	157	—	341	186	155	—	4	3	1	2	—	—	—	—	—	—	—	—	—	—
Branch	241	130	109	2	241	130	109	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Calhoun	296	153	142	1	283	147	135	1	3	—	3	—	—	—	—	—	—	10	6	4	—	—
Cass	178	98	80	—	169	93	76	—	6	4	2	3	1	2	—	—	—	—	—	—	—	—
Charlevoix	40	19	21	—	38	19	19	—	—	—	—	—	—	—	—	2	—	2	—	—	—	—
Cheboygan	42	23	19	—	38	21	17	—	—	—	—	—	—	—	—	4	2	2	—	—	—	—
Chippewa	52	24	27	1	41	21	19	1	—	—	—	—	—	—	—	6	11	3	8	—	—	—
Clare	30	11	19	—	30	11	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Clinton	213	98	113	2	211	98	113	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2
Crawford	7	5	2	—	7	5	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Delta	30	16	14	—	30	16	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Eaton	312	163	159	—	311	152	159	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—
Emmet	64	32	32	—	46	26	20	—	—	—	—	—	—	—	—	18	6	12	—	—	—	—
Genesee	278	137	140	1	277	137	139	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—
Gladwin	8	5	3	—	8	5	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
G'd Traverse	60	28	34	—	51	22	29	—	—	—	—	—	—	—	—	—	—	9	4	5	—	—
Gratiot	170	100	70	—	170	100	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hillsdale	251	112	138	3	250	111	136	3	1	1	—	—	—	—	—	—	—	—	—	—	—	—
Houghton	224	122	102	—	223	122	101	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—

a 3 males, 3 females "Colored," and 1 male "Negro."

b 6 males, 14 females White and Indian, and 1 female "½ Indian."

c 1 female "½ Indian."

d 1 male "Colored."

e 3 males, 6 females White and Indian.

f 1 female White and Indian.

TABLE XII.—CONTINUED.—Deaths by Counties, by Color, and by Sex.

COUNTIES.	ALL COLORS,—1879.				WHITE.				BLACK.			MU-LATTO.			INDIAN.			UNKNOWN.		
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
Barren.....	99	57	42	..	99	57	42	..	..	..	..	..	..	..	..	..	..	..	..	..
Ingham.....	288	155	133	..	283	152	131	..	3	1	2	1	1	..	..	..	..	1	1	..
Ionia.....	206	108	98	..	206	108	98	..	..	..	..	..	..	..	..	..	..	..	..	..
Iosco.....	58	34	24	..	55	34	24	..	..	..	..	..	..	..	..	..	..	..	..	..
Isabella.....	98	48	48	2	93	46	46	1	..	..	..	..	..	..	4	2	2	1	..	1
Isle Royal..... ^b	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jackson.....	337	168	169	..	334	167	167	..	3	1	2	..	..	..	..	..	..	..	..	..
Kalamazoo.....	365	178	184	3	352	173	178	1	10	5	5	1	1	..	..	..	..	2	..	2
Kalkaska.....	17	6	11	..	17	6	11	..	..	..	..	..	..	..	..	..	..	..	..	..
Kent.....	796	428	368	..	790	426	364	..	6	2	4	..	..	..	..	..	..	..	..	..
Keweenaw.....	49	30	19	..	49	30	19	..	..	..	..	..	..	..	..	..	..	..	..	..
Lake.....	16	8	8	..	13	7	6	..	..	..	..	..	..	..	3	1	2	..	..	..
Lapeer.....	251	121	129	1	251	121	129	1	..	..	..	..	..	..	..	..	..	..	..	..
Leelanaw.....	41	17	24	..	39	15	24	..	1	1	..	..	..	..	1	1	..	..	..	..
Lenawee.....	392	209	182	1	384	205	178	1	8	4	4	..	..	..	..	..	..	..	..	..
Livingston.....	176	84	92	..	176	84	92	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackinac.....	22	10	12	..	13	8	5	..	..	..	..	..	..	..	9	2	7	..	..	..
Macomb.....	308	158	150	..	308	158	150	..	..	..	..	..	..	..	..	..	..	..	..	..
Manistee.....	119	71	47	1	118	70	47	1	..	..	..	1	1	..	..	..	..	..	..	..
Manitou.....	6	3	3	..	6	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Marquette.....	217	127	90	..	217	127	90	..	..	..	..	..	..	..	..	..	..	..	..	..
Mason.....	87	55	32	..	86	54	32	..	..	..	..	..	..	..	1	1	..	..	..	..
Meosta.....	141	70	71	..	141	70	71	..	..	..	..	..	..	..	..	..	..	..	..	..
Menominee.....	26	15	11	..	26	15	11	..	..	..	..	..	..	..	..	..	..	..	..	..
Midland.....	64	33	31	..	64	33	31	..	..	..	..	..	..	..	..	..	..	..	..	..
Missaukee.....	17	8	9	..	17	8	9	..	..	..	..	..	..	..	..	..	..	..	..	..
Monroe.....	333	187	143	3	330	186	142	2	4	1	1	..	..	..	1	..	1	1	..	1
Montcalm.....	204	110	91	3	195	106	86	3	..	..	..	..	..	..	..	..	..	9	4	5
Muskegon.....	214	119	94	1	214	119	94	1	..	..	..	..	..	..	..	..	..	..	..	..
Newaygo.....	101	53	48	..	72	39	33	..	..	..	..	..	..	..	5	2	3	24	12	12
Oakland.....	356	185	171	..	352	183	169	..	4	2	2	..	..	..	..	..	..	..	..	..
Oceana.....	97	53	44	..	93	51	42	..	..	..	..	..	..	..	4	2	2	..	..	..
Ogemaw.....	5	1	4	..	5	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..
Ontonagon.....	29	16	13	..	29	16	13	..	..	..	..	..	..	..	..	..	..	..	..	..
Osceola.....	96	51	45	..	96	51	45	..	..	..	..	..	..	..	..	..	..	..	..	..

• 1 male and 1 female White and Indian.
 • 2 males and 5 females White and Indian.
 • 1 female White and Indian.

^b No returns to State Department.
 • 1 male "Negro."

TABLE XII.—CONTINUED.—Deaths by Counties, by Color, and by Sex.

COUNTIES.	ALL COLORS,—1879.				WHITE.				BLACK.			MU-LATTO.			INDIAN.			UNKNOWN.			
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Unknown.
Otsego.....	10	5	5	..	10	5	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ottawa.....	315	155	163	..	315	153	162	..	1	1	..	..	..	..	1	1	1	1	1	..	..
Presque Isle.	19	15	4	..	19	15	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Roscommon..	7	5	2	..	7	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saginaw.....	702	382	336	4	683	354	327	2	3	..	3	3	..	1	10	6	4	5	2	1	2
Sanilac.....	199	103	96	..	199	103	96	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Schoolcraft..	3	2	1	..	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shiawassee..	165	86	77	2	162	86	76	..	..	..	..	..	..	..	..	..	..	3	..	1	2
St. Clair.....	368	206	161	1	367	205	161	1	1	1	..	..	..	..	..	..	..	..	..	..	..
St. Joseph....	255	115	138	2	250	113	136	1	3	1	2	1	1	..	..	..	..	1	..	..	1
Tuscola.....	228	120	108	..	228	120	108	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Van Buren....	247	120	127	..	239	115	124	..	6	4	2	2	1	1	..	..	..	..	..	..	..
Washtenaw...	339	187	172	..	343	182	161	..	11	2	9	5	3	2	..	..	..	..	..	..	..
Wayne.....	1,951	1,027	923	1	1,900	1,002	897	1	41	18	23	7	4	3	2	2	..	1	1	..	..
Wexford.....	67	33	33	1	67	33	34	1	..	..	..	..	..	..	..	..	..	..	..	..	..

* 1 male and 1 female "Colored."

DEATHS OF NATIVE AND OF FOREIGN-BORN INHABITANTS.

Exhibit 6 enables us to compare the number and per cent. of deaths among the native-born population of Michigan with that of the foreign-born for the years 1875-1879, inclusive. The average per cent. of deaths among the native-born for seven years ending with 1878 was 80.29; among the foreign-born 16.91. Further particulars upon this subject are shown in table XIII.

EXHIBIT 6.—Nativity of Decedents in Michigan during each of the Years 1875-1879, according to the Returns.

NATIVITY OF DECEDENTS.	DEATHS, 1875.		DEATHS, 1876.		DEATHS, 1877.		DEATHS, 1878.		DEATHS, 1879.		Av. for 7 years ending with 1878.	
	Number.	Per Ct. of Total.	Number.	Per Ct. of Total.	Number.	Per Ct. of Total.	Number.	Per Ct. of Total.	Number.	Per Ct. of Total.	Number.	Per Ct. of Total.
All Nativities.....	11,990	100.00	12,576	100.00	12,919	100.00	12,766	100.00	14,407	100.00	12,911	100.00
Native.....	9,573	79.84	10,147	80.69	10,305	79.77	10,183	79.77	11,495	79.79	10,366	80.29
Foreign.....	2,106	17.57	2,078	16.52	2,251	17.42	2,237	17.52	2,458	17.06	2,183	16.91
Unknown.....	311	2.59	351	2.79	363	2.81	346	2.71	454	3.15	362	2.80

TABLE XIII.—*Exhibiting, by Number and by Sex, for the State and Counties, the Nativity of all Persons Returned as having Died in Michigan during the Year ending December 31, 1879.*

STATE AND COUNTIES.	ALL NATIVITIES, 1879.				NATIVE.				FOREIGN.				UNKNOWN.			
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.
State.....	14,407	7,522	6,848	37	11,495	5,926	5,533	36	2,458	1,333	1,125	—	454	263	190	1
Alcona.....	27	16	11	—	16	9	7	—	10	6	4	—	1	1	—	—
Allegan.....	322	173	149	—	277	147	130	—	32	19	13	—	13	7	6	—
Alpena.....	63	36	27	—	47	23	21	—	16	10	6	—	—	—	—	—
Antrim.....	43	26	17	—	33	21	12	—	10	5	5	—	—	—	—	—
Baraga.....	20	13	7	—	16	10	6	—	3	3	—	—	1	—	1	—
Barry.....	168	94	74	—	145	80	65	—	20	12	8	—	3	2	1	—
Bay.....	363	176	187	—	271	132	139	—	78	36	42	—	14	8	6	—
Benzie.....	32	20	11	1	28	18	9	1	4	2	2	—	—	—	—	—
Berrien.....	344	187	157	—	296	155	141	—	36	23	13	—	12	9	3	—
Branch.....	241	130	109	2	228	121	105	2	6	5	1	—	7	4	3	—
Calhoun.....	296	153	142	1	252	129	122	1	39	22	17	—	5	2	3	—
Cass.....	178	98	80	—	165	90	75	—	9	5	4	—	4	3	1	—
Charlevoix.....	40	19	21	—	30	15	15	—	10	4	6	—	—	—	—	—
Cheboygan.....	42	23	19	—	31	19	12	—	9	2	7	—	2	2	—	—
Chippewa.....	52	24	27	1	24	14	9	1	23	9	14	—	5	1	4	—
Clare.....	30	11	19	—	23	8	15	—	3	1	2	—	4	2	2	—
Clinton.....	213	98	113	2	181	83	96	2	19	10	9	—	13	5	8	—
Crawford.....	7	5	2	—	6	4	2	—	1	1	—	—	—	—	—	—
Delta.....	30	16	14	—	22	10	12	—	8	6	2	—	—	—	—	—
Eaton.....	312	153	159	—	282	134	148	—	23	14	9	—	7	5	2	—
Emmet.....	64	32	32	—	55	29	26	—	5	1	4	—	4	2	2	—
Genesee.....	278	137	140	1	239	119	119	1	33	15	18	—	6	3	3	—
Gladwin.....	8	5	3	—	7	4	3	—	1	1	—	—	—	—	—	—
Gr. Traverse.....	60	26	34	—	52	22	30	—	8	4	4	—	—	—	—	—
Gratiot.....	170	100	70	—	156	94	62	—	10	4	6	—	4	2	2	—
Hillsdale.....	251	112	136	3	235	103	129	3	14	8	6	—	2	1	1	—
Houghton.....	224	122	102	—	153	80	73	—	70	41	29	—	1	1	—	—
Huron.....	90	57	42	—	69	41	28	—	29	15	14	—	1	1	—	—
Ingham.....	288	155	133	—	263	143	120	—	17	6	11	—	8	6	2	—
Ionia.....	206	108	98	—	189	98	91	—	14	9	5	—	3	1	2	—
Iosco.....	58	34	24	—	38	20	18	—	17	13	4	—	3	1	2	—
Isabella.....	98	48	48	2	80	37	41	2	14	7	7	—	4	4	—	—

TABLE XIII.—CONTINUED.—Deaths by Counties, Nativity, and Sex.

COUNTIES.	ALL NATIVITIES, 1879.				NATIVE.				FOREIGN.				UNKNOWN.			
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.
Isle Royal. ^a																
Jackson.....	337	168	169		292	145	147		42	21	21		3	2	1	
Kalamazoo....	355	178	181	3	282	133	146	3	63	32	31		20	13	7	
Kalkaska.....	17	6	11		16	5	11		1	1						
Kent.....	796	428	368		637	342	295		134	73	61		25	13	12	
Keweenaw....	49	30	19		29	17	12		17	12	5		3	1	2	
Lake.....	16	8	8		10	6	4		2		2		4	2	2	
Lapeer.....	251	121	129	1	192	98	93	1	53	20	33		6	3	3	
Leelanaw....	41	17	24		28	12	16		13	5	8					
Lenawee.....	392	209	182	1	340	175	164	1	48	31	17		4	3	1	
Livingston....	176	84	92		153	74	79		20	10	10		3		3	
Mackinac.....	22	10	12		13	5	8		8	5	3		1		1	
Macomb.....	308	158	150		235	110	125		70	46	24		3	2	1	
Manistee.....	119	71	47	1	92	55	36	1	26	15	11		1	1		
Manitou.....	6	3	3		4	2	2		2	1	1					
Marquette....	217	127	90		152	85	67		63	41	22		2	1	1	
Mason.....	87	55	32		75	47	28		11	7	4		1	1		
McCosta.....	141	70	71		107	52	55		28	15	13		6	3	3	
Menominee....	26	15	11		18	9	9		5	4	1		3	2	1	
Midland.....	64	33	31		47	26	21		16	7	9		1		1	
Missaukee....	17	8	9		14	6	8		3	2	1					
Monroe.....	333	187	143	3	270	145	123	2	51	34	17		12	8	3	1
Montcalm....	204	110	91	3	173	92	78	3	19	12	7		12	6	6	
Muskegon....	214	119	94	1	177	99	77	1	35	19	16		2	1	1	
Newaygo.....	101	53	48		82	40	42		16	10	6		3	3		
Oakland.....	356	185	171		291	150	141		59	32	27		6	3	3	
Oceana.....	97	53	44		89	49	40		6	3	3		2	1	1	
Ogemaw.....	5	1	4		3	1	2		2		2					
Ontonagon....	29	16	13		21	12	9		8	4	4					
Osceola.....	96	51	45		80	45	35		16	6	10					
Otsego.....	10	5	5		7	5	2		3		3					
Ottawa.....	318	155	163		231	110	121		71	34	37		16	11	5	
Presque I....	19	15	4		13	10	3		5	4	1		1	1		

^a No returns from the county clerk to the State Department.

TABLE XIII.—CONTINUED.—*Deaths by Counties, Nativity, and Sex.*

COUNTIES.	ALL NATIVITIES, 1879.				NATIVE.				FOREIGN.				UNKNOWN.			
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.
Roscommon.	7	5	2	—	2	1	1	—	2	2	—	—	3	2	1	—
Saginaw.....	702	362	336	4	561	293	264	4	119	60	59	—	22	9	13	—
Sanilac.....	199	103	96	—	136	68	68	—	63	35	28	—	—	—	—	—
Schoolcraft.	3	2	1	—	3	2	1	—	—	—	—	—	—	—	—	—
Shiawassee..	165	86	77	2	138	73	63	2	23	11	12	—	4	2	2	—
St. Clair.....	368	206	161	1	258	143	114	1	104	58	46	—	6	5	1	—
St. Joseph....	255	115	138	2	226	101	123	2	24	13	11	—	5	1	4	—
Tuscola.....	228	120	108	—	193	105	88	—	33	14	19	—	2	1	1	—
Van Buren..	247	120	127	—	236	115	121	—	11	5	6	—	—	—	—	—
Washtenaw..	359	187	172	—	261	133	128	—	83	48	35	—	15	6	9	—
Wayne.....	1,951	1,027	923	1	1,345	691	653	1	483	257	226	—	123	79	44	—
Wexford.....	67	33	33	1	54	24	29	1	6	5	1	—	7	4	3	—

CAUSES OF DEATH, 1879.

Social organization has many striking advantages, and not the least of these is the opportunity that it especially affords for the accumulation of numerous and useful facts leading to the solution of problems that affect the perpetuity and strength of such organization.

No more valuable facts can be collected than those pertaining to the causes of deaths in a community, and, for this reason, the best methods for obtaining such facts is a subject that should elicit the profoundest consideration of those upon whom devolves the duty of establishing these methods. Although the present law, relating to the registration of births, marriages, and deaths in Michigan, needs greatly to be improved in order to become of most value to the people; still, we are able to obtain much useful knowledge by the present system.

Table XIV. enables us to study the ratio of deaths in 1879 from the principal causes of deaths, according to the general classification adopted by Dr. Farr, of England.

A greater number of deaths occurred in 1879 than in any year since 1872. The ratio of deaths from zymotic diseases to the whole number of deaths in the State was greater in 1879 than in any year since 1872, and greater than from any other cause in 1879. The per cent. of deaths, in 1879, among the zymotic and developmental diseases was greater than the average per cent. of the eight years ending with 1879, and less than the average among the constitutional and local causes, and of deaths from violence.

The deaths from all causes may be studied, by months, in 1879, and compared with the averages of the different months in the nine years ending with 1879, in Diagram No. 3, page 112. Diagram No. 4 graphically represents the deaths that have occurred in Michigan in each month of the year 1879,

from all causes and from each class of causes, as compiled in Exhibit 7. For the further convenience of study, the specified causes of the deaths returned are alphabetically arranged in Table XVII., and show the sex and age of decedents.

TABLE XIV.—*Number of Deaths Returned as having occurred in Michigan from All Causes, and from each Class of Causes, and the Per Cent. of Deaths from each Class of Causes to Deaths from All Causes, for each of the Years 1875 to 1879, inclusive.*

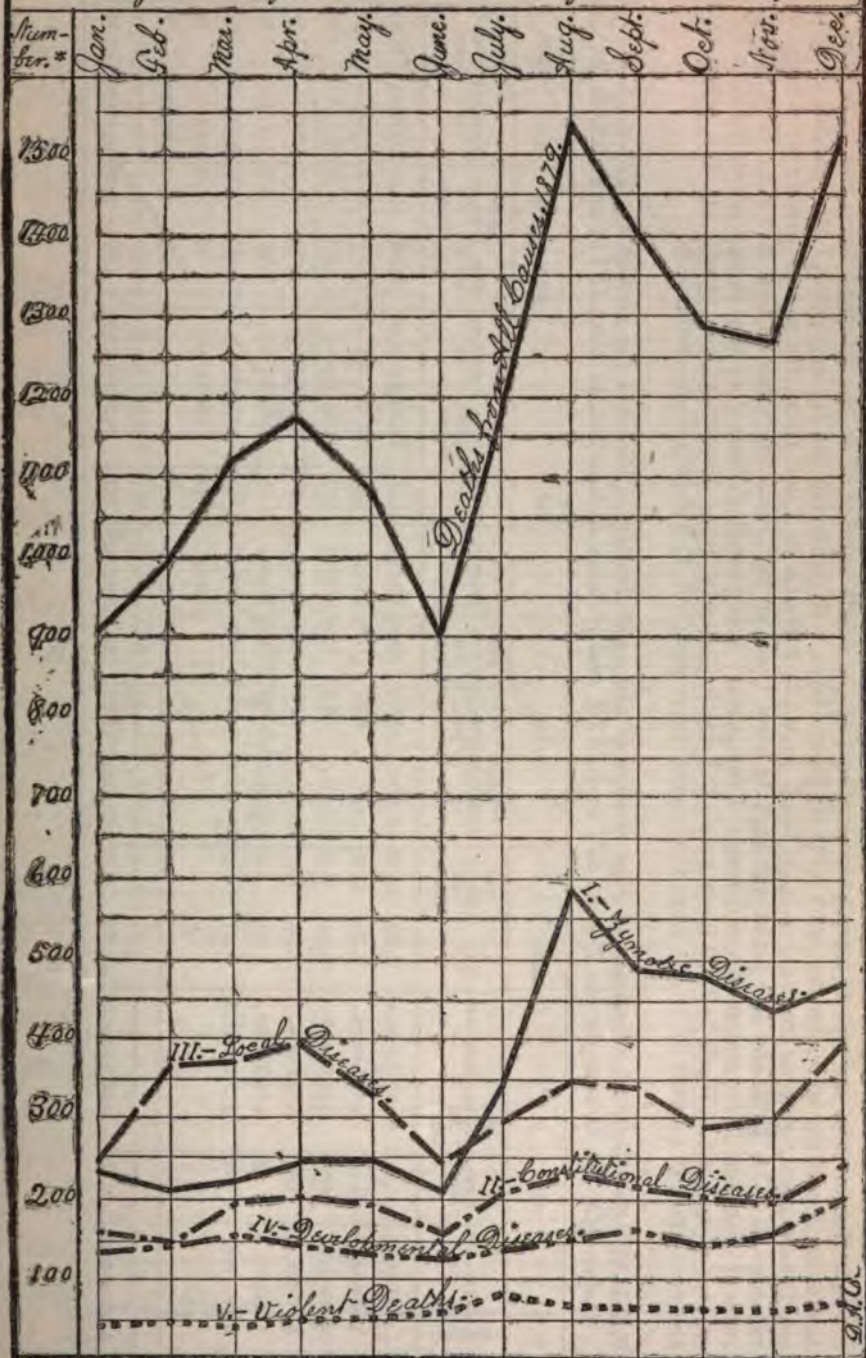
CAUSES OF DEATH, CLASSES.	1875.		1876.		1877.		1878.		1879.		AVERAGE FOR EIGHT YEARS, END- ING WITH 1879.	
	Num- ber.	Per Ct. of Total.	Num- ber.	Per Ct. of Total.	Num- ber.	Per Ct. of Total.	Num- ber.	Per Ct. of Total.	Num- ber.	Per Ct. of Total.	Num- ber.	Per Ct. of Total.
All Causes.....	11,990	100.00	12,576	100.00	12,919	100.00	12,766	100.00	14,407	100.00	13,098	100.00
I.—Zymotic.....	2,798	23.34	3,094	24.60	3,319	25.69	3,121	24.45	4,177	28.99	3,524	26.90
II.—Constitutional.	2,190	18.27	2,348	18.67	2,454	19.00	2,290	17.94	2,343	16.26	2,262	17.27
III.—Local Diseases	3,565	29.73	3,647	29.00	3,506	27.14	3,481	27.27	3,918	27.20	3,767	28.76
IV.—Developmental	1,353	11.28	1,458	11.59	1,527	11.82	1,825	14.29	1,802	12.51	1,431	10.93
V.—Violent Deaths.	646	5.39	747	5.94	654	5.06	691	5.41	697	4.84	665	5.08
Unknown and Un- classified.....	1,438	11.99	1,282	10.19	1,459	11.29	1,358	10.64	1,470	10.20	1,449	11.06

EXHIBIT 7.—*By Months, the Number of Deaths Returned as having Occurred in Michigan from All Causes and from each Class of Causes during the year 1879.*

CAUSES OF DEATH, CLASSES.	YEAR, 1879.	MONTHS OF DEATH, 1879.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
All Causes.....	14,407	903	992	1114	1174	1,083	902	1,183	1,537	1,403	1,286	1,268	1,521
I.—Zymotic.....	4,177	234	210	220	244	246	211	343	584	489	481	438	470
II.—Constitutional.	2,343	160	150	191	201	192	159	205	228	213	202	197	241
III.—Local Diseases	3,918	244	362	368	395	329	243	295	349	341	288	300	397
IV.—Developmental	1,802	134	143	156	145	135	125	137	150	162	146	160	201
V.—Violent Deaths.	697	42	46	39	49	51	60	79	68	66	63	62	68
Unknown and Un- classified.....	1,470	89	81	140	140	130	104	124	158	132	106	111	144

Diagram No. 4.

Deaths Returned as having Occurred in Michigan in 1879, by months from All Causes and from each Class of Causes.



* Scale = 239 to the inch.

Designed by Henry B. Baker

DEATHS IN 1879, GROUPED BY PART OF BODY DISEASED.

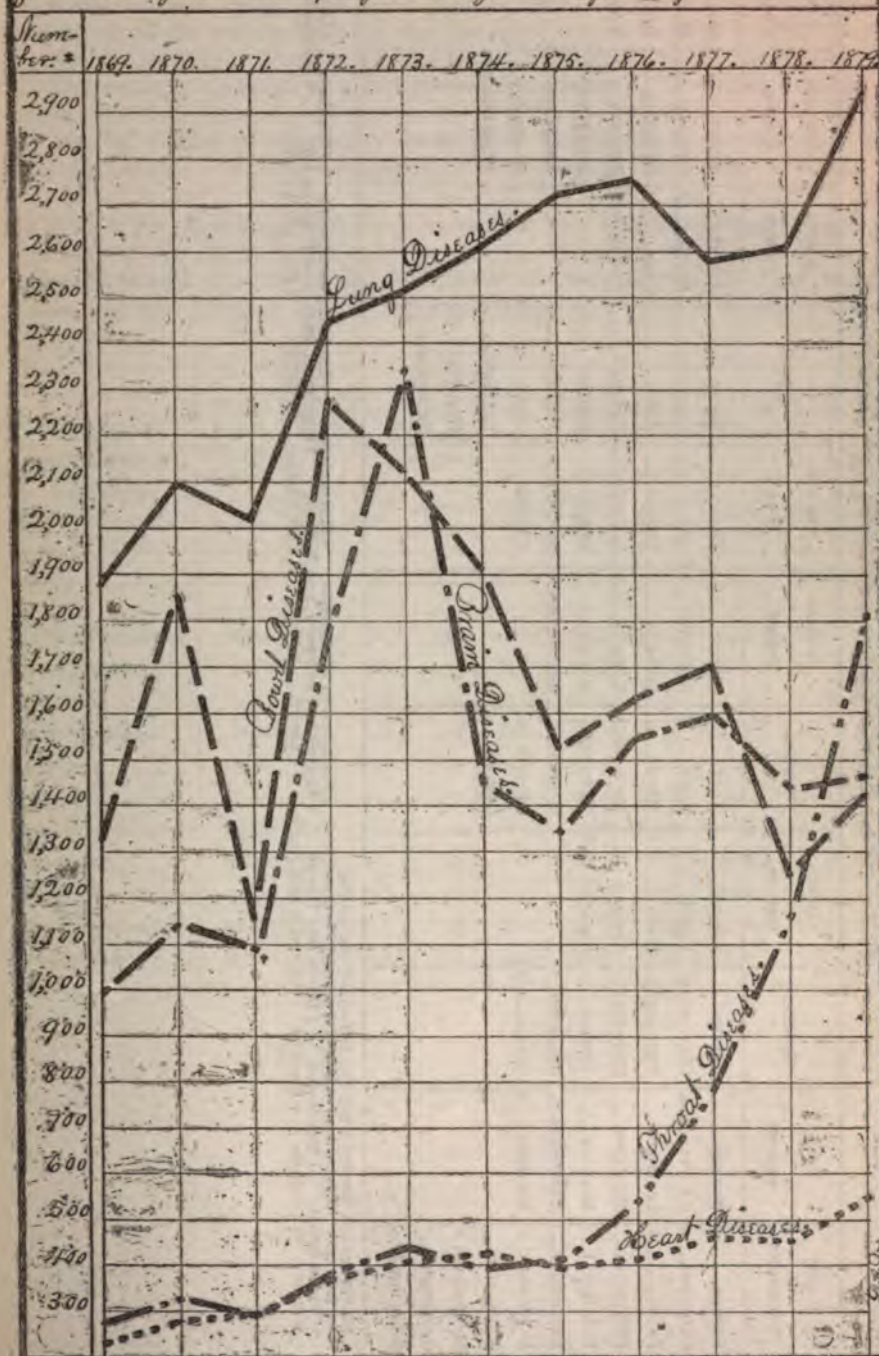
From Exhibit 8 we are able to learn what per cent. of the whole number of deaths returned were due to diseases of particular organs of the body, for the years 1874-1879, inclusive. By removing the decimal point, in the column of per cents, one figure to the right, we see that, in 1879, there were 204.4 deaths in 1,000 from diseases of the lungs; a ratio that was exceeded in 1874, 1875, and 1876, that was slightly more than in 1877, and the same as that in 1878. The next greatest ratio of deaths in 1879 occurred from diseases of the throat; being much greater than that in any preceding year for which returns were made. While in 1879 there were 125.1 deaths in 1,000 from diseases of the throat, in 1878, when there was the next greatest number of deaths from that cause, there were but 90.9 deaths in one thousand.

EXHIBIT 8.—Order of Succession of Five Groups of Causes of Deaths in Michigan for each of the Years 1874 to 1876, inclusive, of Six Groups for the Years 1877 and 1878, and of Seven Groups for the Year 1879, according to the Returns.

ORDER	1874.			1875.			1876.			1877.			1878.			1879.		
	DISEASES OF	Num-ber.	Per Ct. to All Causes.	DISEASES OF	Num-ber.	Per Ct. to All Causes.	DISEASES OF	Num-ber.	Per Ct. to All Causes.	DISEASES OF	Num-ber.	Per Ct. to All Causes.	DISEASES OF	Num-ber.	Per Ct. to All Causes.	DISEASES OF	Num-ber.	Per Ct. to All Causes.
----	All Causes.	12,500	100.00	All Causes.	11,990	100.00	All Causes.	12,576	100.00	All Causes.	12,919	100.00	All Causes.	12,766	100.00	All Causes.	14,407	100.00
1	Lungs...	2,603	20.84	Lungs...	2,720	22.69	Lungs...	2,753	21.89	Lungs...	2,584	20.00	Lungs...	2,669	20.44	Lungs...	2,945	20.44
2	Bowels..	1,907	15.26	Bowels..	1,521	12.69	Bowels..	1,633	12.98	Bowels..	1,702	13.17	Brain...	1,440	11.25	Throat..	1,803	12.51
3	Brain..	1,450	11.60	Brain....	1,338	11.16	Brain....	1,549	12.31	Brain....	1,602	12.32	Bowels..	1,247	9.77	Brain...	1,466	10.18
4	Heart...	420	3.36	Throat..	408	3.39	Throat..	541	4.30	Throat..	791	6.05	Throat..	1,160	9.09	Bowels..	1,424	9.88
5	Throat..	395	3.16	Heart...	391	3.26	Heart...	403	3.22	Heart...	460	3.56	Heart...	452	3.54	Heart...	549	3.81
										Liver....	126	.98	Liver....	143	1.12	Liver....	121	.84
													Kidneys.	113	.78			
1-5	5 Groups	6,777	54.22	5 Groups	6,376	53.19	5 Groups	6,881	54.72	6 Groups	7,245	56.08	6 Groups	7,051	55.23	7 Groups	8,421	58.45

Diagram No. 5.

Deaths Returned as having Occurred in Michigan
from each of Five Groups of Causes, for each of the Years 1869-1879.



Scale = 1/18 to the inch.

Designed by Henry B. Baker.

EXHIBIT J.—*Eleven Geographical Divisions of the State, formed for the purpose of facilitating the study of Causes of Death, with a list of Counties included in each Division.*

Upper Peninsular.	North- western.	Northern.	North- eastern.	Western.	Northern Central.	Bay and Eastern.	Central.	South- western.	Southern Central.	South- eastern.
Baraga.....	Benzie.....	Antrim.....	Alcona.....	Kent.....	Clare.....	Bay.....	Barry.....	Allegan....	Branch.....	Macomb.
Chippewa.... ^a	Gr. Traverse.	Charlevoix.	Alpena.....	Lake.....	Gladwin.... ⁿ	Huron.....	Clinton.... ^s	Berrien.... ^s	Calhoun....	Monroe.
Delta..... ^b	Leelanaw....	Cheboygan.	Iosco..... ^k	Mason.....	Isabella.....	Lapeer....	Eaton..... ^t	Cass..... ^t	Hillsdale....	Oakland.
Houghton....	Manistee....	Crawford..	Ogemaw....	Muskegon.. ^m	Mecosta.... ^o	Saginaw....	Genesee....	Van Buren.	Jackson....	Wayne.
Isle Royal...	Manitou.... ^f	Emmet.... ^b	Presque I.. ^l	Newaygo..	Midland....	Sanilac....	Gratiot....		Kalamazoo...	
Keweenaw...	Missaukee...	Kalkaska.. ⁱ		Oceana....	Roscommon. ^p	St. Clair....	Ingham.... ^q		Lenawee....	
Mackinac.... ^c	Wexford.... ^g	Otsego.... ^j		Osceola....		Tuscola....	Ionia.....		St. Joseph...	
Marquette....				Ottawa.....			Livingston..		Washtenaw. ^u	
Menominee. ^d							Montcalm... ^r			
Ontonagon....							Shiawassee...			
Schoolcraft. ^e										

No returns of deaths from the following townships:

^a Detour. ^b Baldwin, Maple Ridge, and Masonville. ^c Holmes and St. Ignace. ^d Menominee. ^e Munising and Onota. ^f Galliee. ^g Concord.
^h Maple River. ⁱ Boardman. ^j Dover and Hayes. ^k Sherman, Thompson, and Wilber. ^l Bismarck, Metz, and Presque Isle. ^m Montague and
Norton. ⁿ Billings. ^o Martiny. ^p Gerrish and Nester. ^q Leroy. ^r Pine. ^s New Buffalo. ^t Ontwa. ^u Salem and Sylvan.

DEATHS BY CLASSES—GEOGRAPHICAL DIVISIONS OF STATE. 163

DEATHS, 1879, BY CLASSES OF CAUSES, BY DIVISIONS OF THE STATE.

Table XV. shows the number and per cent. of deaths from all causes, and from the five principal causes, for the State, and for each of eleven geographical divisions of the State; and also the per cent. of deaths in 1879 to the population in 1874. The largest per cent. of deaths from all causes occurred in the Southern Central, and Southeastern divisions. The least number of deaths from all causes occurred in the Northeastern division. The largest per cent. of deaths to population occurred in the Northern division, and the smallest per cent. of deaths to population occurred in the Central division.

TABLE XV.—*Exhibiting for the State and for each of Eleven Geographical Divisions of the State, the Number of Deaths Returned, and the Per Cent. of Deaths in each Division to Total Deaths in the State during the Year 1879; also, the Per Cent. of Deaths from each Class of Causes to Deaths from All Causes.*

STATE AND GEOGRAPHICAL DIVISIONS.	Popula- tion in 1874, Rep- resented by Deaths in 1879.	DEATHS REPORTED, 1879.		Per Ct. of all Deaths in 1879 to Pop- ulation in 1874.	PER CENT. OF DEATHS FROM EACH CLASS OF CAUSES TO DEATHS FROM ALL CAUSES, BY GEOGRAPHICAL DIVISIONS.					
		Num- ber.	Per Ct. of Total.		Class I. Zymotic Diseases.	Class II. Consti- tutional Diseases.	Class III. Local Diseases.	Class IV. Develop- mental Diseases.	Class V. Violent Deaths.	Unk. and Un- classi- fied.
STATE.....	1,313,164	14,407	100.00	1.09	23.99	16.26	27.20	12.51	48.38	10.20
Upper-Peninsular.	56,057	672	4.67	1.20	19.94	10.71	23.96	17.11	9.23	19.05
North-western.....	25,625	342	2.37	1.33	22.24	11.70	22.22	16.08	9.06	11.70
Northern.....	11,374	223	1.55	1.96	23.32	14.80	20.63	12.56	8.62	20.18
North-eastern.....	11,643	172	1.19	1.48	29.65	12.79	20.93	12.21	9.88	14.53
Western.....	140,731	1,725	11.97	1.23	36.99	15.01	22.67	10.43	5.22	9.68
Northern-Central..	21,555	348	2.42	1.61	37.07	15.80	25.86	8.33	5.46	7.47
Bay and Eastern..	184,323	2,210	15.34	1.20	32.44	14.03	24.66	12.53	4.16	12.17
Central.....	239,893	2,180	15.13	.91	29.31	16.65	29.45	11.33	4.31	8.94
South-western.....	114,718	1,091	7.57	.95	32.17	17.14	28.14	10.45	5.04	7.06
Southern-Central..	270,844	2,496	17.33	.92	24.48	18.67	32.69	13.22	4.17	6.77
South-eastern.....	241,401	2,948	20.46	1.22	25.61	18.18	27.41	13.77	3.87	11.16

TABLE XVI.—CAUSES OF DEATH.—NOSOLOGICAL ARRANGEMENT.

Exhibiting the Number of Reported Deaths in Michigan and in each County of the State during the Year 1879, from Specified Causes, Statistically Classified.—(Still-Births Included.)

CAUSES OF DEATH,—1879.		COUNTIES,—1879.																									
	STATE.	Alcona.	Allegan.	Alpena.	Antrim.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.	Climbton.	Crawford.	Delta.	Eaton.	Emmet.	Genesee.	Gladwin.	Gr. Traverse.		
All Causes.....	14,407	27	322	63	43	20	108	363	32	344	241	296	178	40	42	52	30	213	7	39	312	64	278	8	60	170	
Specified Causes.....	13,003	24	300	52	40	18	154	319	26	320	225	286	166	34	30	44	29	188	6	29	293	45	255	8	54	153	
Causes not Specified.....	1,404	3	22	11	3	2	14	44	6	24	16	10	12	6	12	8	1	25	1	1	19	19	23	....	6	17
CLASSES.																											
I.—Zymotic Diseases.....	4,177	11	87	12	17	6	35	117	9	120	63	92	73	8	3	18	7	57	2	7	81	8	75	7	18	63	
II.—Constitutional Diseases.....	2,343	3	51	11	6	3	32	55	4	70	43	48	21	9	4	9	4	37	....	3	53	10	43	1	10	27
III.—Local Diseases.....	3,918	7	102	16	9	1	53	80	7	84	82	99	47	8	10	9	14	58	1	11	100	14	89	....	16	44
IV.—Developmental Diseases.....	1,802	3	43	7	3	6	26	42	4	29	32	35	19	5	9	7	2	28	2	5	47	6	39	....	0	13
V.—Violent Deaths.....	687	....	17	6	5	2	8	15	2	17	5	10	6	2	3	1	2	8	1	2	11	7	7	....	4	6
Unclassified.....	66	....	....	....	....	....	....	10	....	....	....	1	....	2	1	....	....	....	....	1	1	....	2	....	....	....
ORDERS.																											
I.—1. Miasmatic Diseases.....	4,125	11	86	12	17	5	35	117	9	120	62	92	72	8	3	18	7	55	2	7	79	8	74	7	18	63	
2. Enthetic Diseases.....	15	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	1	....	....	....
3. Diotic Diseases.....	21	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4. Parasitic Diseases.....	16	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
II.—1. Diathetic Diseases.....	571	1	11	5	2	....	13	5	3	14	9	12	5	....	3	....	....	10	....	2	15	2	12	....	5	7
2. Tubercular Diseases.....	1,772	2	40	6	4	3	19	50	1	56	34	56	16	....	1	9	4	27	....	1	37	8	31	1	5	20

[illegible]

TABLE XVI.—CONTINUED.—*Causes of Death, Classified.*

CAUSES OF DEATH,—1879.	COUNTIES.—1879.																
	Alcona.	Allagan.	Alpena.	Antrim.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.	Clinton.
9. Stricture of Intestines.....	2										1						
10. Fistula.....	1																
11. Stomach Diseases.....	83	1			2	3			4	4	2	2					1
12. Pancreas Disease.....	1										1						
13. Hepatitis.....	8																
14. Jaundice.....	18					1					1						
15. Liver Disease.....	99	4			1	2	1	1	2	2	4						1
16. Spleen Disease.....	5									1	2						
17. Bowel Diseases, etc.....	41	1	1							1					2		1
18. Mouth Disease.....																	
III.—ORDER 5. Urinary Organs.....	190	4	2	1	1	2			2	4	6	1	1		1		4
1. Nephritis.....	18										1						1
2. Ichnuria.....																	
3. Bright's Disease of Kidneys.....	36				1						1						
4. Diabetes.....	42					1			1	3	4		1		1		1
5. Calculus (Gravel, etc.).....	23	1		1													1
6. Cystitis.....	6	1															
7. Kidney Diseases.....	65	2	2			1			1	1	2	1			2		1
III.—ORDER 6. Generative Organs.....	24									1					2		

[illegible]

CAUSES OF DEATH, CLASSIFIED.

[illegible]

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2. Poison
3. Drowning
4. Hanging
5. Otherwise and not Specified
V.—ORDER 5. Execution
1. Hanging .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—ORDER 6. Violent Deaths not Included above .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
UNCLASSIFIED .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1. Breast Disease .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2. Chest Disease .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3. Head Disease .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4. Hemorrhage, Umbilical .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5. Hemorrhage .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6. Inflammation .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Causes not Specified .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CAUSES OF DEATH, CLASSIFIED.

[illegible]

CAUSES OF DEATH, CLASSIFIED.

CLASS I.—DISEASES OF NERVOUS SYSTEM.																																																																																																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81																			

[illegible]

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[illegible]

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CAUSES OF DEATH, SPECIFIED.

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	52
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• Includes 1 knitting of bowels.

CAUSES OF DEATH, SPECIFIED.

201

[illegible]

CAUSES OF DEATH, SPECIFIED.

[illegible]

[illegible]**Includes Inflammatory:**

CAUSES OF DEATH, SPECIFIED.

[illegible]

• Includes 1 "Diphtheritic Group," 2 "Diphtheria Group," and 1 "Diphtheroid Group."

CAUSES OF DEATH, SPECIFIED.

209

Males.....	3	1	1	4	1	4	3	3	2	3	21	16	18	14	17	22	Epilepsy.....	1	1	2	4	4	2	1	1	1	1
Females...	3	2	3	4	1	1	1	2	1	1	21	16	17	17	14	8	"	5	2	2	2	1	2	1	1	1	
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Eruption on Back.....	...	...	...	...	...	...	...	...	...
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Erysipelas, Bone.....	...	...	...	...	...	...	...	...	...
Females...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Erysipelas in Bowels.....	...	...	...	...	...	...	...	...	...
Females...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Erysipelas in Throat.....	...	...	...	...	...	...	...	...	...
Total.....	7	4	12	11	10	7	8	8	3	5	8	91	73	68	107	104	Erysipelas.....	28	1	1	6	6	2	6	4	7	
Males.....	6	1	6	7	6	3	4	5	2	2	44	37	31	55	64	56	"	16	1	1	1	2	1	1	2	4	
Females..	1	3	6	4	4	4	3	3	6	6	47	38	37	31	43	48	"	12	1	1	5	4	1	5	2	1	
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Explosion of Boiler.....	...	...	...	...	...	...	...	...	...
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Explosion of Kerosene.....	...	...	...	...	...	...	...	...	...
Females...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Explosion.....	...	...	...	...	...	...	...	...	...
Females...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Total.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Exposure.....	...	...	...	...	...	...	...	...	...
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Females...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Females...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Total.....	1	6	1	1	1	3	1	1	2	4	1	25	22	22	17	21	Falling Tree.....	...	...	...	...	...	...	...	...	...
Females..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Females...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	"	...	...	...	...	...	...	...	...	...
Males.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Feet, Sore.....	...	...	...	...	...	...	...	...	...
Total.....	5	1	3	1	2	6	4	6	4	5	1	44	39	32	45	77	Fever, Bilious.....	5	3	3	5	4	1	1	1	2	
Males.....	2	1	1	1	1	1	1	4	2	1	1	16	18	18	27	33	"	1	1	2	1	2	1	1	1	1	
Females..	3	1	2	1	1	5	3	2	5	3	28	26	21	23	22	39	"	4	2	1	4	2	1	1	1	1	
Total.....	2	2	2	1	1	1	1	1	1	1	9	4	4	1	1	8	Fever, Catarrhal.....	4	2	2	2	2	2	2	2	2	
Males.....	2	1	1	1	1	1	1	1	1	1	4	2	3	1	1	3	"	6	2	2	2	2	2	2	2	2	
Females...	2	1	1	1	1	1	1	1	1	1	5	1	1	1	1	5	"	1	1	1	1	1	1	1	1	1	

* Includes 1 "Congestion caused by going into the water when heated."

* Includes 5 Black.

* Includes 1 Acute.

CAUSES OF DEATH, SPECIFIED.

Males.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Females.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Total.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Males.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Females.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Total.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	8																				

Includes 6 Worm Fits.

CAUSES OF DEATH, SPECIFIED.

218

[illegible]

^a Includes 1 "In Head." ^b Includes 2 of Foot.

CAUSES OF DEATH, SPECIFIED.

217

[illegible]

Includes 3 strangulated.

CAUSES OF DEATH, SPECIFIED.

211

[illegible]

Includes 5 Worm Fits.

CAUSES OF DEATH, SPECIFIED.

[illegible]

27—1879.

a Includes 1 "In Head." b Includes 2 of Foot.

CAUSES OF DEATH, SPECIFIED.

217

[illegible]

Includes 3 strangulated.

CAUSES OF DEATH, SPECIFIED.

[illegible]

Includes 1 "Consumption of."

CAUSES OF DEATH, SPECIFIED.

[illegible]

CAUSES OF DEATH, SPECIFIED.

231

[illegible]

Includes 8 Scarlet Rash.

CAUSES OF DEATH, SPECIFIED.

235

Total.....	3	1	2	4	1	7	5	5	2	1	40	60	66	77	71	89	Teething.....	39	1
Males.....	1	1	2	1	6	4	2	1	1	1	20	38	39	39	37	41	"	26	
Females..	1	1	2	1	1	1	3	1			14	22	27	38	34	48	"	13	1
Males.....					1						1						Temporal Bone, Inflamm. of.....		
Total.....	1	1	1	1	1	1	1	2			5	6	6	9		5	Tetanus (Lock-jaw).....	1	1
Males.....	1	1	1	1				2			4	5	3	1		4	"	1	1
Females...											1	1	3	1		1	"		
Males.....											1					1	Tetanus.....		1
Females...												1	1	1			"		
Females...												1	1	1			Tetter		
Total.....	2	2	3	5	2	4	1	3	1		27	12	10	21	7	18	Throat Disease.....	18	3
Males.....	2	2	2	3	1	1					18	4	7	13	3	11	"	9	1
Females...											14	8	3	8	4	7	"	9	2
Males.....												5	1	3	1		Throat, Inflamm. of.....		
Females...												3	2	1	2		"		
Females...												1	1	1			"		
Males.....											1	1	1				Throat, Paral. of.....		1
Total.....	3	1	1	1	1	3					7	2	2	16	6	3	Throat, Putrid Sore.....	2	1
Males.....						2					5	2	1	7	4	1	"	2	1
Females...						1					2		1	9	2		"		
Females...																	"	1	1
Males.....																	Throat, Ulceration of.....		
Females...																	"		
Total.....	2	1	2	1	1	1	2				6	8	7	5	11	8	Thrush.....	4	1
Males.....						1					1	1	2	3	5	3	"	1	
Females...						1					5	2	5	2	6	5	"	2	1
Total.....	3	1	1	1	1	1	1	1	1	1	5					1	Tonsillitis.....	3	
Males.....						1					1					1	"		1

Includes 1 Congenital.

CAUSES OF DEATH, SPECIFIED.

237

[illegible]

Includes 1 "Internal."

Females...		Males...		Total...		Grand Total...																	
Females...	4	8	3	8	13	10	19	29	21	14	8	25	162	132	13	181	101	133	Whooping-cough.....	132	6	1	2
Males	2	3	1	5	4	6	11	15	6	17	77	64	6	59	43	66	71	2	"	71	2	1	2
Females...	5	2	3	0	13	18	6	8	5	8	25	68	70	92	53	86	81	4	"	81	4		
Unknown.																			"				
Females...	1	2	1	1	2	1	1	2											Wind-pipe, obstruct'n in.	1			
Males	1	1	1	1	1	1	1	1											Worms	6	1		
Females...	1	1	1	1	1	1	1	1											"	2	1		
Males	1	1	1	1	1	1	1	1											"				
Females...	1	1	1	1	1	1	1	1											Wounds, Army				
Males	1	1	1	1	1	1	1	1											Wounds	1		1	1
Females...	1	1	1	1	1	1	1	1											"			1	1
Females...	1	1	1	1	1	1	1	1											"			1	1

Includes 1 death from Fever Sore.

Exhibit R shows the specified causes of deaths in Michigan compiled as Casualty in Table XVII. The number of deaths returned according to this tabulation was 246. The large number of deaths from "shot accidentally" shows the careless use of fire-arms.

EXHIBIT R.—*Deaths in Michigan in 1879, Compiled as Casualty.*

CASUALTY,—CAUSES AS RETURNED.	Num-ber.	CASUALTY,—CAUSES AS RETURNED.	Num-ber.
Total number tabulated as Casualty in Table XVII.....	245	Injury to mother.....	1
Street-car accident.....	1	Breaking rollway.....	1
Killed by runaway team.....	4	Swallowed a five-cent piece.....	1
Run over by wagon.....	5	Cut with circular saw in saw-mill.....	1
Run over by a pair of logging trucks.....	1	Placing mouth to tea-kettle spout.....	1
Run over.....	2	Accidentally scalded.....	1
Horse running away.....	2	Hurt.....	1
Kicked by a horse.....	9	Cherry pits.....	1
Killed by a horse.....	5	Killed by a bull.....	3
Killed by pump-rod.....	1	Kernel of corn in wind-pipe.....	1
Killed in saw-mill.....	8	Accidental poisoning.....	3
Killed in shingle-mill.....	1	Injuries accidental.....	1
Accident by machinery.....	2	Injured by birth.....	1
Killed by shaft in mill.....	1	Injuries.....	1
Killed by wheel in stave factory.....	1	Injured skull from falling.....	1
Caught by bolt in shop.....	1	Fall from wagon.....	3
Killed by pile driver.....	1	Fell down elevator.....	2
Injured in thrashing machine.....	1	Fell from lumber pile.....	1
Killed in mill.....	2	Fell from wagon and broke his neck.....	1
Killed by locomotive.....	1	Killed by a fall.....	14
Killed in mine.....	8	Falling down stairs.....	1
Killed by gas ("damps") in well.....	2	Injuries in falling from buggy.....	1
Explosion of cannon, July 4.....	1	Fall and confinement.....	1
Boiler explosion.....	1	Fall from railroad car.....	1
Explosion of gasoline.....	1	Killed by fall from fence.....	1
Explosion of lamp.....	1	Fall from barn.....	1
Killed by accident.....	68	Fall from building.....	3
Swallowing a foreign substance.....	1	Shocked from falling rock.....	1
Injury to abdomen.....	1	Thrown from carriage.....	1
Shot accidentally.....	20	Fall of barn.....	1
Accident by tree.....	6	Crushed by a log.....	2
Killed in woods.....	3	Thrown from wagon.....	2
Arm torn out by machinery.....	1	Killed at a barn raising.....	1
Killed in well.....	2	Killed by grand stand disaster.....	13
Choked by candy.....	1	Accident from falling timber.....	1
Choked by accident.....	1	Killed by wagon.....	1
Killed.....	4	Elevator accident.....	2
Injured by logs.....	1	Injury by street wagon.....	1

EXHIBIT 9.—*Certain facts concerning Persons Returned as having died by Suicide in Michigan during the Year 1879.*

DATE OF DEATH.		Age.	Condi- tion.	Sex.	Color.	Occupation.	Nativity.	Means Used.
MONTH.	Day.							
January	5	24	M.	F.	W.	House-wife.....	England	Poison.
January	26	21	S.	F.	W.	Domestic.....	Michigan.....	Unknown.
January	31	43	M.	M.	W.	Grocery & Saloon..	Germany.....	Unknown.
February	8	35	M.	M.	W.	Unknown.....	Unknown.....	Unknown.
February	11	48	M.	M.	W.	Farmer	Virginia.....	Unknown.
March.....	5	18	S.	M.	W.	Laborer.....	Michigan	Hanging.
March.....	10	26	S.	F.	W.	Courtesan	Unknown.....	Unknown.
March.....	19	55	M.	F.	W.	Farmer's wife..	Ireland	Drowning.
March.....	29	37	S.	M.	W.	Sailor	Canada.....	Unknown.
April.....	5	45	S.	F.	W.	Unemployed....	New York.....	Unknown.
April.....	9	25	S.	F.	W.	Unknown.....	Unknown.....	Poison.
April.....	9	21	S.	F.	W.	Teacher.....	Michigan.....	Poison.
April.....	9	18	S.	M.	W.	Book-binder....	Michigan.....	Unknown.
April.....	10	22	S.	M.	W.	Clerk.....	Michigan.....	Unknown.
April.....	17	62	M.	M.	W.	Farmer	Unknown.....	Hanging.
April.....	28	24	S.	F.	W.	Domestic	Wisconsin	Unknown.
May.....	8	60	M.	M.	W.	Farmer	New York.....	Unknown.
May.....	12	41	M.	M.	W.	Laborer	Kentucky	Shooting.
May.....	25	56	Unk.	M.	W.	Bar-tender	Prussia	Poison.
June.....	5	35	S.	M.	W.	Farmer	Michigan.....	Hanging.
June.....	11	60	W.	M.	W.	Laborer.....	New York.....	Unknown.
June.....	14	74	M.	M.	W.	Engineer	Unknown.....	Unknown.
June.....	18	25	Unk.	M.	W.	Unknown.....	Michigan.....	Unknown.
June.....	23	52	M.	M.	W.	Baker	Germany.....	Unknown.
June.....	26	39	M.	M.	W.	Laborer.....	Ohio	Opium.
June.....	27	25	S.	M.	W.	Laborer.....	Germany.....	Unknown.
June.....	30	56	M.	M.	W.	Miner	England	Unknown.
July.....	2	32	M.	F.	W.	Farmer's wife..	Canada.....	Unknown.
July.....	13	Unk.	S.	M.	W.	Unknown.....	Germany.....	Hanging.
July.....	15	37	M.	M.	W.	Merchant.....	Germany.....	Shooting.
July.....	24	60	M.	M.	W.	Shoe-maker....	New York.....	Unknown.
July.....	25	61	M.	M.	W.	Butcher	Germany.....	Unknown.
August.....	5	65	M.	M.	W.	Farmer	Vermont.....	Unknown.
August.....	6	50	M.	M.	W.	Farmer	Germany.....	Hanging.
August.....	10	21	S.	M.	W.	Farmer	Michigan.....	Hanging.
August.....	15	47	M.	M.	W.	Farmer	Bohemia	Drowning.
August.....	18	56	M.	M.	W.	Hotel-keeper...	England.....	Shooting.
August.....	29	27	S.	M.	W.	Farmer	Indiana.....	Hanging.

EXHIBIT 9.—CONTINUED.—*Suicidal Deaths, 1879.*

DATE OF DEATH.		Age.	Condi- tion.	Sex.	Color.	Occupation.	Nativity.	Means Used.
MONTH.	Day.							
August.....	29	58	M.	M.	W.	Farmer.....	New Jersey.....	Cutting throat.
September....	3	40	M.	M.	W.	Engineer.....	Ohio.....	Unknown.
September....	13	36	M.	M.	W.	Farmer.....	Germany.....	Hanging.
September....	18	19	S.	M.	W.	Farmer.....	Illinois.....	Poison.
September....	18	55	M.	M.	W.	Hotel-keeper...	New York.....	Unknown.
September....	28	52	M.	F.	W.	Farmer.....	Germany.....	Unknown.
October.....	4	18	M.	F.	W.	Farmer.....	Ohio.....	Poison.
October.....	13	65	M.	M.	W.	Carpenter.....	Germany.....	Unknown.
October.....	27	60	M.	M.	W.	Farmer.....	Germany.....	Hanging.
October.....	29	62	M.	M.	W.	Farmer.....	Ohio.....	Hanging.
November....	10	55	M.	M.	W.	Farmer.....	Germany.....	Hanging.
November....	18	17	S.	M.	W.	Farmer.....	Michigan.....	Hanging.
November....	28	48	W.	M.	W.	Banker.....	New York.....	Unknown.
November....	29	60	M.	F.	W.	Unknown.....	Ireland.....	Poison.
December....	2	36	M.	M.	W.	Shoe-maker....	Germany.....	Opium.
December....	4	58	M.	M.	W.	Farmer.....	Connecticut....	Hanging.
December....	5	Unk.	W.	M.	W.	Laborer.....	Germany.....	Unknown.
December....	5	18	S.	M.	W.	Laborer.....	Canada.....	Unknown.
December....	13	45	M.	M.	W.	Farmer.....	New York.....	Unknown.
December....	22	19	S.	F.	W.	Servant.....	Michigan.....	Unknown.
December....	31	31	M.	M.	W.	Unknown.....	Michigan.....	Shooting.

EXHIBIT 9.—CONTINUED.—*Suicidal Deaths, 1879.*

OCCUPATIONS.	No.	OCCUPATIONS.	No.	OCCUPATIONS.	No.
Bakers	1	Engineers	2	Servants	1
Bankers	1	Farmers	20	Shoe-makers	2
Bar-tenders	1	"Grocery and Saloon"	1	Teachers	1
Book-binders	1	Hotel-keepers	2	Unemployed	1
Butchers	1	House-wives	3	Unknown	6
Carpenters	1	Laborers	7		
Clerks	1	Merchants	1	Total	59
Courtesans	1	Miners	1		
Domestics	2	Sailors	1		

NATIVITY.	No.	NATIVITY.	No.	NATIVITY.	No.
Bohemia	1	Ireland	2	Unknown	5
Canada	3	Kentucky	1	Vermont	1
Connecticut	1	Michigan	11	Virginia	1
England	3	New Jersey	1	Wisconsin	1
Germany	14	New York	7		
Indiana	1	Ohio	4	Total	59
Illinois	1	Prussia	1		

MEANS USED.	NUMBER.		MEANS USED.	NUMBER.		MEANS USED.	NUMBER.	
	Males.	Fe-males.		Males.	Fe-males.		Males.	Fe-males.
Cutting throat	1		Opium	2		Unknown	23	7
Drowning	1	1	Poison	2	5			
Hanging	13		Shooting	4		Total	46	13

In Table XVIII., among the fifteen principal causes of death there included, consumption is first in the list. Although the male population of Michigan exceeds that of the female, the number of deaths of females from consumption was 146 greater than that of males. Of the number of deaths from old age there were twenty more females than males.

TABLE XVIII.—*Order of Succession of Fifteen Principal Conditions and Causes of Death in Michigan in 1879, according to the Returns, Exhibiting for each Specified Condition and Cause, by Sex, the Number of Deaths, and the Per Cent. of Deaths from each Cause to Deaths from All Causes.*

ORDER.	SPECIFIED CAUSES AND CONDITIONS, 1879.	NUMBER OF DEATHS.			PER CENT. FROM EACH CAUSE TO DEATHS FROM ALL CAUSES.		
		Total.	Males.	Females.	Total.	Males.	Females.
1	Consumption	1,680	767	913	11.66	10.20	13.33
2	Diphtheria	1,473	711	762	10.22	9.45	11.13
3	Still-births	a 749	423	298	5.20	5.62	4.35
4	Pneumonia	701	402	299	4.87	5.34	4.37
5	Old Age	608	294	314	4.22	3.91	4.59
6	Scarlet Fever	413	225	193	2.90	2.99	2.62
7	Heart Disease	414	222	192	2.87	2.95	2.80
8	Fever, Typhoid	397	190	207	2.06	2.53	3.02
9	Cholera Infantum	b 300	173	125	2.08	2.30	1.83
10	Convulsions	275	147	128	1.91	1.95	1.87
11	Cancer	272	124	148	1.99	1.65	2.16
12	Dropsy	260	108	152	1.80	1.44	2.22
13	Paralysis	255	122	133	1.77	1.63	1.94
14	Casualty	c 245	201	43	1.70	2.67	.63
15	Bowels, Inflammation of	237	117	120	1.65	1.66	1.75
Total		3,294	4,226	4,027	57.50	56.18	58.81
All Causes		d 14,407	7,522	6,848	100.00	100.00	100.00

a Includes 28 unknown sex.

c Includes 1 unknown sex.

b Includes 2 unknown sex.

d Includes 37 unknown sex.

FIFTEEN PRINCIPAL CAUSES OF DEATH.

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EXHIBIT T.—Order of Succession of Fifteen Principal Causes of Death in Michigan for each of the Years 1874-79.

Order	1874.	1875.	1876.	1877.	1878.	1879.
1	Consumption.....	1,392	Consumption.....	1,590	Consumption.....	1,680
2	Pneumonia.....	800	Still-born.....	616	Diphtheria.....	1,473
3	Typhoid Fever.....	610	Pneumonia.....	627	Still-born.....	749
4	Still-born.....	464	Old Age.....	493	Old Age.....	701
5	Scarlet Fever.....	440	Typhoid Fever.....	426	Pneumonia.....	603
6	Old Age.....	428	Scarlet Fever.....	399	Scarlet Fever.....	418
7	Diarrhea.....	365	Cholera Infantum	337	Heart Disease.....	414
8	Heart Disease.....	326	Heart Disease.....	311	Typhoid Fever.....	397
9	Dysentery.....	302	Diarrhea.....	320	Heart Disease.....	393
10	Cholera Infantum	278	Apoplexy and Paral.	311	Apoplexy and Paral.	300
11	Brain, Infl. of.....	261	Convulsions and Fits	304	Convulsions and Fits	275
12	Convulsions and Fits	258	Brain, Infl. of.....	275	Brain, Infl. of.....	272
13	Apoplexy and Paral.	232	Bowels, Infl. of..	218	Convulsions and Fits	260
14	Dropsy.....	228	Casualty.....	241	Diarrhea.....	215
15	Diphtheria.....	213	Dropsy.....	289	Bowels, Infl. of...	237

31-1879.

Tables XIX. and XX., following, show the deaths in Michigan in 1879 from ten specified causes relating to number, per cent., sex, and ages of decedents, and to the months in which the deaths took place.

TABLE XIX.—Deaths, in Michigan, from Ten Specified Causes during the Year 1879, Exhibiting the Number of each Sex, Total Number in each Month, and at different Periods of Age, according to the Returns.

SEX, MONTHS, AND AGES.		CAUSES OF DEATH,—1879.									
		Cancer.	Cepha- litis.	Croup. ^a	Diar- rhea. ^b	Diph- theria.	Dysen- tery. ^c	Measles.	Scarlet Fever.	Typhoid Fever.	Whoop- ing Cough.
SEX.	Total.....	272	222	277	226	1,473	135	167	418	397	162
	Males.....	124	111	165	131	711	67	77	225	190	77
	Females.....	148	111	112	95	762	68	90	193	207	85
MONTHS.	January.....	17	15	31	2	95	3	4	38	15	4
	February.....	14	14	24	3	48	3	7	49	24	6
	March.....	21	27	20	8	68	-----	10	34	24	3
	April.....	23	20	23	3	81	1	13	45	23	6
	May.....	23	12	16	6	68	4	21	53	13	13
	June.....	29	11	16	14	56	3	13	40	11	10
	July.....	24	17	11	44	81	11	22	23	18	19
	August.....	33	23	16	82	137	50	23	20	48	29
	September.....	21	26	18	31	180	34	15	24	53	21
	October.....	22	21	23	20	232	9	6	23	61	14
	November.....	19	18	37	8	208	10	14	29	55	8
	December.....	26	18	42	5	217	7	19	40	52	25
	Unknown.....	-----	-----	-----	-----	2	-----	-----	-----	-----	-----
AGES.	Av. Month..... ^d	23	19	23	19	123	11	14	35	33	14
	Under 5.....	11	147	227	202	630	108	119	239	45	132
	5 to 10.....	-----	22	41	3	506	5	23	115	32	6
	10 to 15.....	2	13	8	1	233	-----	4	38	34	1
	15 to 20.....	-----	9	-----	1	53	1	7	8	67	-----
	20 to 25.....	5	5	-----	1	15	-----	3	2	42	-----
	25 to 30.....	3	3	-----	-----	7	-----	1	6	38	-----
	30 to 35.....	9	-----	-----	1	5	1	3	1	16	-----
	35 to 40.....	10	6	-----	-----	3	-----	4	-----	24	-----
	40 to 45.....	23	3	-----	1	2	-----	-----	1	16	-----
	45 to 50.....	27	2	-----	2	2	-----	-----	-----	15	-----
	50 to 55.....	29	2	-----	3	2	4	-----	-----	13	-----
	55 to 60.....	38	3	1	1	1	1	-----	-----	8	-----
	60 to 65.....	34	3	-----	1	1	2	-----	1	14	-----
	65 to 70.....	31	3	-----	3	-----	3	-----	-----	11	-----
	70 to 75.....	21	-----	-----	2	-----	5	1	-----	7	-----
	75 to 80.....	19	1	-----	2	1	2	-----	-----	5	-----
	80 and over.....	7	-----	-----	2	-----	2	-----	-----	4	-----
	Unknown.....	3	-----	-----	-----	12	1	2	7	6	2

^a Includes 45 Membranous Croup. ^b Includes 14 Chronic. ^c Includes 2 Chronic. ^d Exclud-
ing unknown month.

TEN SPECIFIED CAUSES OF DEATH.

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TABLE XX.—*Per Cent. of Deaths during the Year ending December 31, 1879, from each of Ten Specified Causes to Deaths from All Causes; and Per Cent. of each Sex, of Deaths in each Month, and at different Periods of Age to Total Deaths from each Specified Cause.*

SEX, MONTHS, AND AGES.		CAUSES OF DEATH,—1879. PER CENT. OF TOTAL.									
		Cancer.	Cepha- litis.	Croup.	Diar- rhea.	Diph- theria.	Dysen- tery.	Measles.	Scarlet Fever.	Typhoid Fever.	Whoop- ing Cough.
SEX.	Per Ct. of All Causes	1.89	1.54	1.92	1.57	10.22	.94	1.16	2.90	2.76	1.12
	Males	45.39	30.00	59.57	57.96	48.27	49.63	46.11	53.83	47.86	47.53
	Females	54.41	30.00	40.43	42.04	51.73	50.37	53.89	46.17	52.14	52.47
MONTHS.	January	6.25	6.76	11.19	.83	6.45	2.22	2.40	9.09	3.78	2.47
	February	5.15	6.31	8.66	1.33	3.26	2.22	4.19	11.72	6.05	4.94
	March	7.72	12.16	7.22	3.54	4.62		5.99	2.13	6.05	1.85
	April	8.46	9.01	8.30	1.33	5.50	.74	7.73	10.77	5.79	4.94
	May	8.46	5.41	5.73	2.65	4.62	2.96	12.57	12.68	3.27	8.02
	June	12.66	4.95	5.73	6.19	3.80	2.22	7.73	9.57	2.77	6.17
	July	8.92	7.66	3.97	19.47	5.50	8.15	13.17	5.56	4.53	11.72
	August	12.13	10.36	5.73	36.28	9.30	37.04	13.77	4.73	12.69	17.90
	September	7.72	11.71	6.50	13.72	12.22	23.19	8.98	5.74	13.35	12.96
	October	8.09	9.46	8.30	8.95	15.75	6.67	3.59	5.50	15.37	8.64
	November	6.99	8.11	12.96	3.54	14.12	7.41	8.38	6.94	13.85	4.94
	December	9.56	8.11	15.16	2.21	14.73	5.19	11.38	9.57	13.10	15.43
	Av. Month	8.33	8.33	8.33	8.33	5.23	8.33	8.33	8.33	8.33	8.33
AGES.	Under 5	4.04	66.22	91.96	89.38	42.77	30.00	71.26	57.18	11.34	23.63
	5 to 10		9.91	14.50	1.33	34.33	3.70	13.77	27.51	8.06	3.70
	10 to 15	.74	5.86	2.59	.44	15.42		2.43	9.09	2.56	.62
	15 to 20		4.05		.44	3.80	.74	4.19	1.91	16.88	
	20 to 25	1.94	2.25		.44	1.02		1.90	.48	10.56	
	25 to 30	1.10	1.35			.48		.90	1.44	9.57	
	30 to 35	3.31			.44	.34	.74	1.80	.24	4.03	
	35 to 40	3.68	2.70			.29		2.40		6.05	
	40 to 45	5.46	1.35		.44	.14			.24	4.03	
	45 to 50	9.93	.90		.58	.14				3.73	
	50 to 55	10.05	.90		1.33	.14	2.96			3.27	.82
	55 to 60	13.97	1.35	.36	.44	.67	.74			2.02	
	60 to 65	12.50	1.35		.44	.67	1.63		.24	3.53	
	65 to 70	11.40	1.35		1.23		2.22			2.77	
	70 to 75	7.72			.88		3.70	.69		1.78	
	75 to 80	6.99	.45		.98	.67	1.43			1.26	
	80 and over	2.57			.98		1.43			1.01	
	Unknown	1.10				.51	.74	1.20	1.67	1.51	1.23

* Excluding deaths in unknown month.

Cancer.—The total number of deaths in Michigan in 1879 from this disease was 272. Of males there were 124, of females 148. Taking the considerable excess of the male population over that of the female in the State, the excess of deaths among the females is considerably greater than the results in the table imply. Of the total number, 28 were especially peculiar to females, and among the deaths from cancer, in which the organs diseased were unspecified, there were 29 more deaths among females than among males. As in previous years, deaths from cancer of the stomach are most frequent. Exhibit S facilitates the study of this subject.

EXHIBIT S.—*Deaths of Persons Returned as having Died from Cancer in Michigan during the Year 1879, indicating part of body affected.*

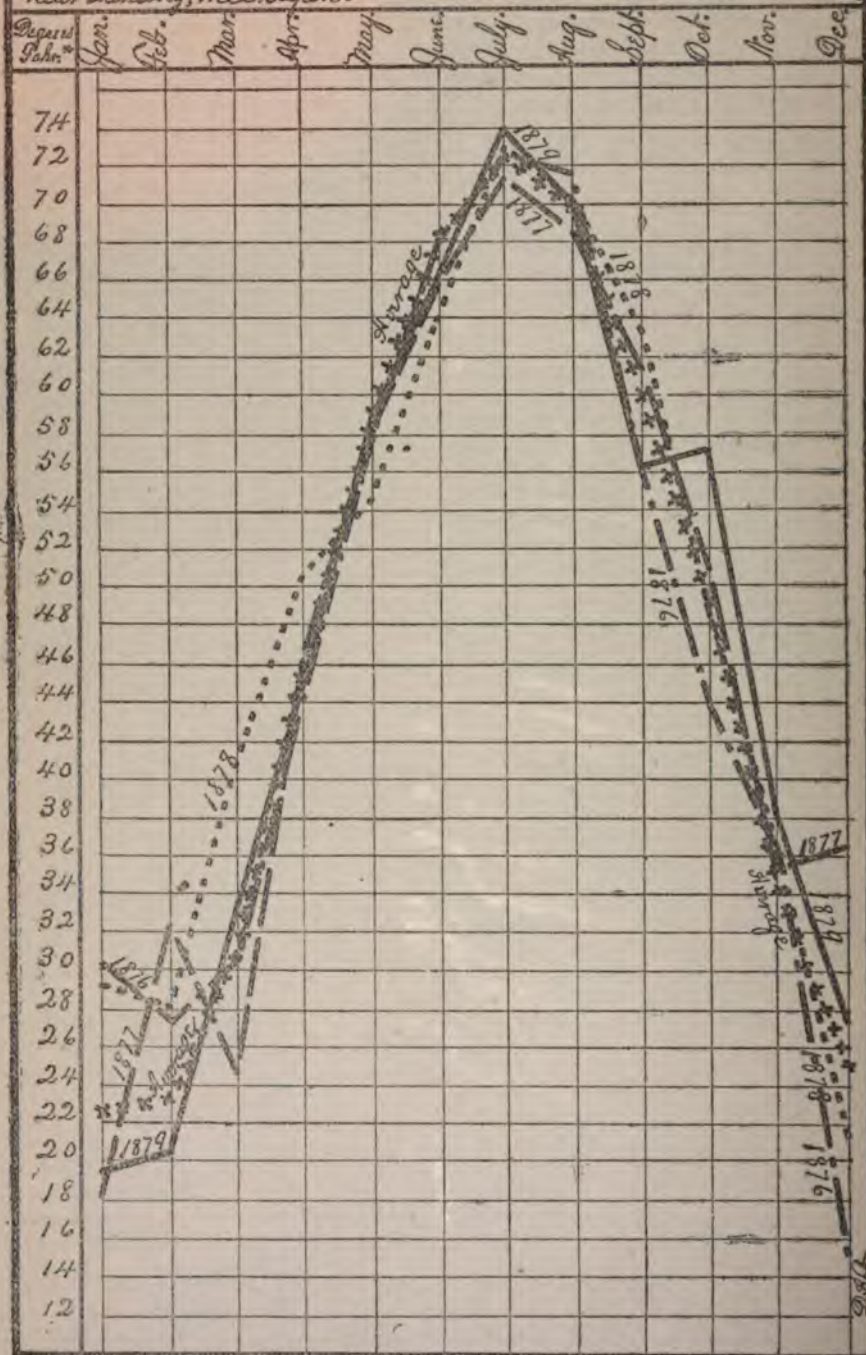
AS RETURNED.	Total.	Males.	Females.	AS RETURNED.	Total.	Males.	Females.
Cancer of Abdomen.....	1	.....	1	Cancer of Neck.....	1	1	.....
Cancer of Bowels.....	8	3	5	Cancer of Nose.....	1	1	.....
Cancer of Breast.....	18	.....	18	Cancer of Optic Nerve.....	1	1	.....
Cancer of Chest.....	1	1	.....	Cancer of Stomach.....	70	45	25
Cancer of Eye.....	1	1	.....	Cancer of Throat.....	4	3	1
Cancer of Face.....	9	6	8	Cancer of Womb.....	10	.....	10
Cancer of Head.....	2	1	1	Bone Cancer.....	1	.....	1
Cancer of Knee.....	1	.....	1	Hard Cancer.....	1	1	.....
Cancer of Leg.....	1	1	.....	Cancer Tumors.....	2	1	1
Cancer of Lip.....	1	1	.....	Total Specified.....	141	73	68
Cancer of Liver.....	5	5	.....	Cancer (Unspecified).....	131	51	80
Cancer of Liver and Rectum..	1	.....	1	Aggregate.....	272	124	148
Cancer of Liver and Stomach..	1	1	.....			

EXHIBIT Z.—*Deaths in Michigan in 1879, Compiled as Unknown.*

CAUSES AS RETURNED.	Males.	Females.	Unknown.	CAUSES AS RETURNED.	Males.	Females.	Unknown.
Total number compiled Unknown in Table XVII.....	736	668	5	Disease Contracted in Army.....	1	.....	.....
A Hard Blow.....	1	.....	.....	Exhaustion.....	5	3	.....
Bilious Attack.....	1	.....	.....	Feeble.....	1	2	.....
Blights.....	1	.....	.....	Female Complaint.....	.....	5	.....
Blood Consumption.....	1	3	.....	Flesh Decay.....	1	.....	.....
Blood Stagnation.....	.....	2	.....	General Congestion.....	1	.....	.....
Born Feeble.....	1	.....	.....	Hydra.....	.....	1	.....
Chronic.....	.....	1	.....	Idiotic.....	1	1	.....
Complicated Diseases.....	1	2	.....	Lingering Disease.....	2	.....	.....
Complicated.....	.....	1	.....	Lingering Illness.....	1	.....	.....
Congenital Disease.....	1	1	.....	Minors' Disease.....	1	.....	.....
Congestion of Blood.....	1	.....	.....	Natural.....	2	.....	.....
Congestion.....	9	11	.....	Operation.....	1	.....	.....
Couldn't Nurse.....	.....	1	.....	Sudden Death.....	.....	1	.....
Degeneration.....	.....	1	.....	Trouble.....	.....	1	.....
Died at Birth.....	1	1	.....	Tubercle.....	1	.....	.....
Died for want of Breath.....	.....	1	.....	Wasting of Blood.....	.....	1	.....
Diseased from Birth.....	.....	1	.....	Waste of Tissue.....	1	1	.....
				Unknown.....	609	616	5

Diagram No. 6.

Average Temperature, by months, for the Years 1876, 1877, 1878, and 1879, and the Average for 10 Years ending with 1879, at the Agricultural College near Lansing, Michigan.



* Scale = 10 Degrees to the inch. Designed by Henry Baker.

METEOROLOGICAL CONDITIONS, AND THEIR RELATIONS TO DEATHS.

The meteorological statements following are of conditions observed at Lansing. The observations at that point are presumed fairly to represent the meteorological conditions for the State during the year 1879.

EXHIBIT 10.—TEMPERATURE.—*Average by Years and by Months, for the Years 1870 to 1879, inclusive, at the Agricultural College, near Lansing, Michigan, and near the center of the thickly-settled part of the State. (Results of Observations by Prof. R. C. Kedzie.)*

YEARS.	ANNUAL AVERAGE.	AVERAGE TEMPERATURE, STATED IN DEGREES FAHRENHEIT, BY MONTHS.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.....	49.11	25.37	24.25	30.28	50.39	64.32	70.87	74.40	70.11	63.66	52.45	38.40	24.80
1871.....	47.93	24.75	25.65	38.18	50.13	61.39	68.21	70.60	71.19	58.10	53.91	31.95	21.12
1872.....	45.54	21.59	21.34	24.75	47.39	58.48	71.82	74.91	71.23	62.03	47.44	29.80	15.74
1873.....	44.54	15.87	19.10	28.30	43.17	56.98	70.60	70.82	69.49	57.38	44.68	28.49	23.54
1874.....	47.32	27.70	25.51	32.30	56.87	59.58	70.61	72.02	69.39	62.85	49.10	35.00	26.96
1875.....	43.09	12.87	8.35	26.20	41.11	60.82	66.57	69.67	65.48	58.50	42.93	32.96	31.58
1876.....	46.17	30.22	27.38	30.55	44.16	57.95	68.14	72.48	71.55	56.50	43.74	36.33	15.23
1877.....	47.42	18.07	32.31	24.51	46.16	58.25	65.93	71.43	68.46	61.28	50.83	35.94	36.57
1878.....	48.29	29.11	28.07	40.90	50.55	54.57	64.08	73.04	70.15	63.15	48.33	36.29	21.29
1879.....	46.88	19.19	20.40	33.19	44.84	58.76	66.02	74.03	70.00	56.21	57.28	38.22	27.46
Av. for 10 Years*	46.63	22.47	23.24	30.92	45.48	59.11	68.29	72.34	69.70	59.95	49.07	34.27	25.03

* Average for 10 years ending with 1879.

For the ten years ending with 1879 the average annual temperature was 46.63. For the year 1879 the annual temperature was slightly greater, being 46.88. The temperature in the months of October, November, and December was considerably higher than the average which may somewhat account for the great number of deaths from diphtheria in those months. The last five lines in Exhibit 10 are graphically shown in diagram No. 6.

TABLE XXXI.—TEMPERATURE.—*Exhibiting the Mean Temperature, the Highest and Lowest Temperature, the Monthly Range, the Mean Daily Range, the Mean Range from Day to Day, and the Greatest Rise or Fall of Thermometer in 24 hours and in 14 hours, for each Month of the Year 1879, at the Agricultural College, near Lansing, Michigan.*

YEAR AND MONTHS, 1879.	TEMPERATURE.—FAHRENHEIT, 1879.											
	Average of 3 Daily Observations,—7 A. M., 2 P. M., and 9 P. M.	REGISTER- ING THERMOMETER.			AVERAGE RANGE.		GREATEST CHANGE IN 24 HOURS,—2 P. M. TO 2 P. M.		GREATEST CHANGE IN 14 HOURS,—7 A. M. TO 9 P. M.		REGISTERING THERMOMETER,— GREATEST CHANGE IN 24 HOURS.	
		Highest.	Lowest.	Range.	Daily,—7 A. M. to 9 P. M.	From Day to Day,—2 P. M. to 2 P. M.	Degrees of Rise and Fall.	Day of Month.	Degrees of Rise and Fall.	Day of Month.	Degrees of Change.	Day of Month.
Year 1879..	46.58	97	-18	115	14.87	17.24	R. 37	Apr. 21	R. 37	Apr. 21	45	Aug. 7
January ..	19.19	44	-18	62	13.39	14.65	F. 28	11, 25	F. 28	25	40	25
February ..	20.40	41	-6	47	11.46	14.79	R. 26	15	R. 24	18	30	20
March.....	33.19	66	4	62	12.74	15.65	F. 38	2	R. 31	10	34	10
April.....	44.84	81	12	69	10.03	20.77	R. 37	21	R. 37	21	35	20
May.....	58.76	91	25	66	18.68	21.52	R. & F. 34	8, 20	R. 34	8	41	18, 20
June.....	66.02	95	33	62	16.60	19.50	F. 33	1	R. 25	9	38	10
July.....	74.03	97	47	50	16.81	18.90	F. 25	16	F. 25	16	37	11, 29, 31
August...	70.00	96	34	62	19.06	20.90	F. 32	7	R. 31	30, 31	45	7
September	56.21	85	27	58	16.13	18.50	R. 33	1	R. 31	25, 26	33	4
October...	57.28	87	15	72	15.23	17.90	R. 31	20	R. 31	20	35	2
November	38.22	75	13	62	10.87	12.67	R. & F. 23	6, 28	R. & F. 22	6, 13, 28	29	23
December.	27.46	58	-3	61	8.39	11.00	R. 22	27	F. 21	10	38	10

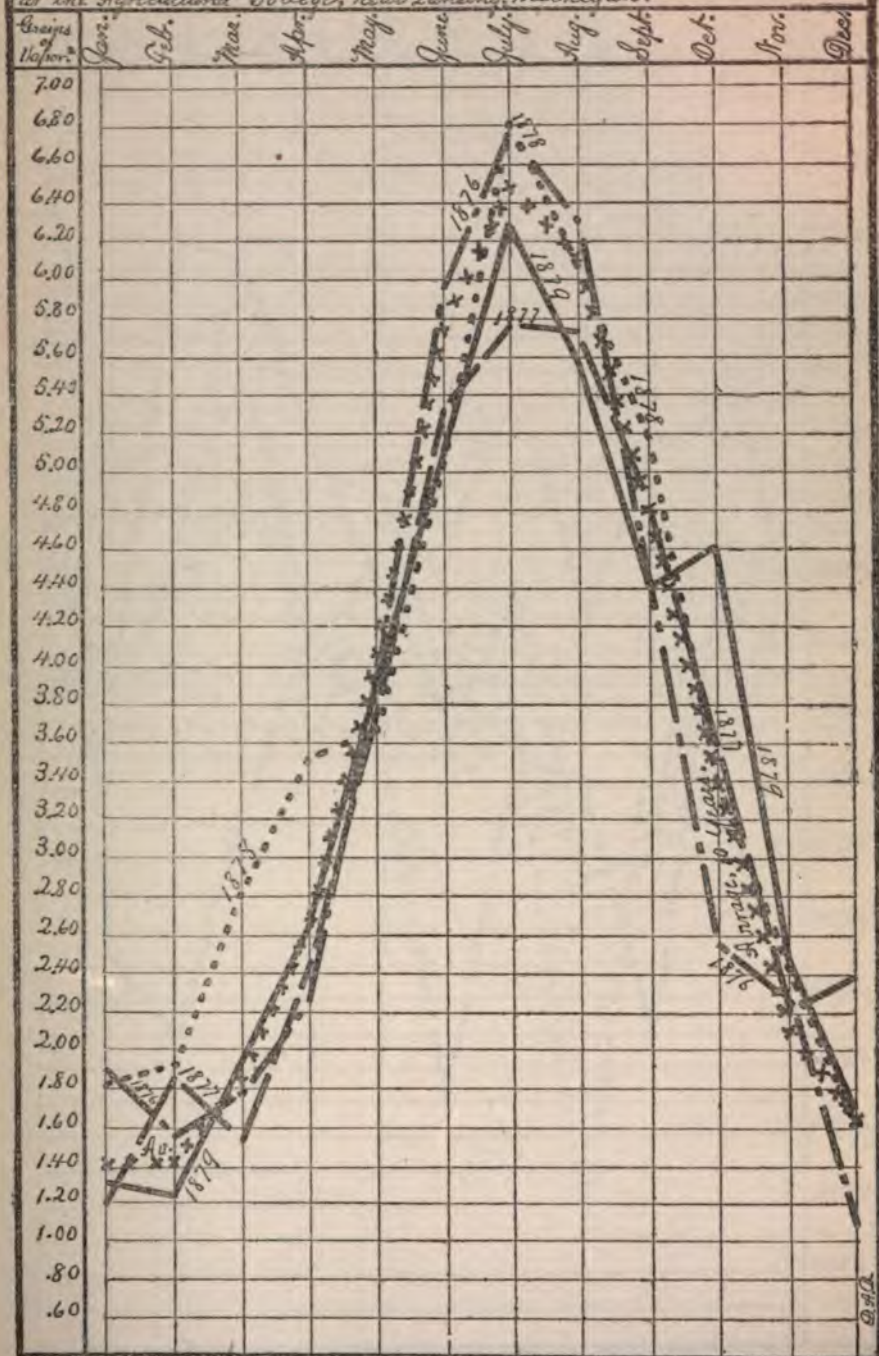
EXHIBIT 11.—ABSOLUTE HUMIDITY.—*Grains of Vapor in a Cubic Foot of Air, by Months, for the Years 1870 to 1879, inclusive, at the Agricultural College, near Lansing, Michigan.*

YEARS.	ANNUAL AVERAGE.	GRAINS OF VAPOR IN CUBIC FOOT OF AIR, BY MONTHS.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870.....	3.90	1.50	1.35	1.76	3.06	4.92	6.45	7.19	6.54	5.45	3.95	2.22	1.70
1871.....	3.56	1.63	1.53	2.28	3.00	4.53	5.77	6.35	6.43	4.41	3.48	1.89	1.23
1872.....	3.70	1.31	1.23	1.32	2.99	4.29	6.78	7.33	7.15	5.57	3.40	1.82	1.18
1873.....	3.36	1.14	1.43	1.62	2.71	4.00	5.85	6.45	6.29	4.50	2.92	1.73	1.28
1874.....	3.36	1.58	1.55	2.00	2.08	3.77	6.07	6.00	5.75	4.72	8.15	2.06	1.55
1875.....	3.11	0.92	0.73	1.63	2.12	3.74	5.17	5.91	5.23	4.38	2.57	1.84	2.05
1876.....	3.40	1.88	1.57	1.78	2.26	3.93	5.95	6.76	6.31	4.43	2.56	2.26	1.09
1877.....	3.43	1.19	1.85	1.53	2.47	3.79	5.32	5.76	5.74	4.82	3.59	2.22	2.50
1878.....	3.69	1.82	1.91	2.80	3.51	3.68	5.06	6.83	6.06	5.18	3.33	2.44	1.00
1879.....	3.43	1.31	1.23	1.93	2.64	3.94	5.09	6.30	5.68	4.40	4.61	2.46	1.00
Av. for 10 y'rs.*	3.50	1.43	1.44	1.86	2.68	4.06	5.75	6.49	6.11	4.79	3.36	2.10	1.00

* Average for 10 years ending with 1879.

Diagram No. 7.

Humidity of Atmosphere (Grains of Vapor in Cubic Foot of Air), by months, for the years 1876, 1877, 1878, and 1879, and the Average for 10 years ending with 1879, at the Agricultural College, near Lansing, Michigan.

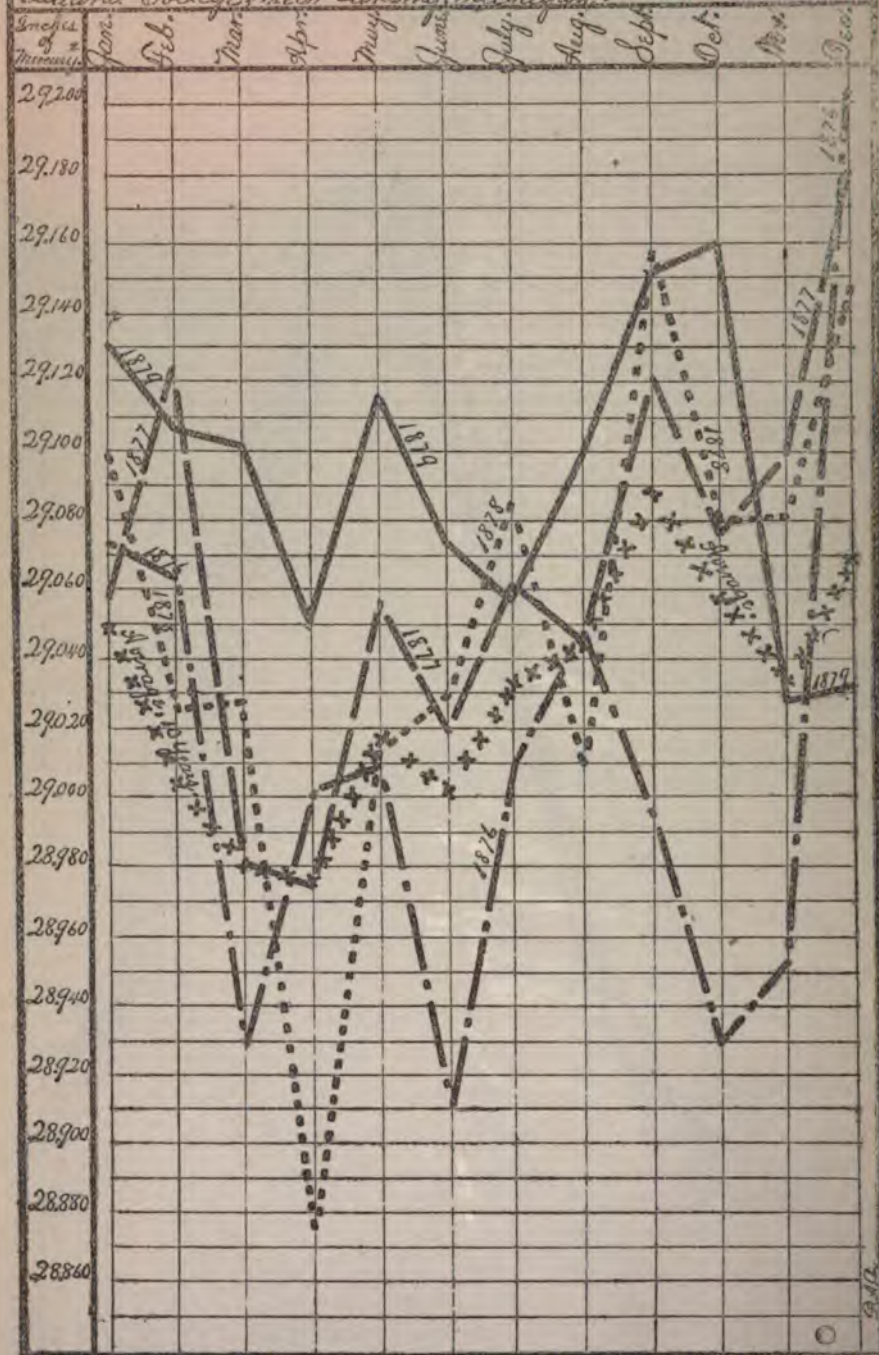


Scale = 1.00 to the inch.

Designed by Henry B. Baker

Diagram No. 8.

Atmospheric Pressure, by month, for the years 1876, 1877, 1878, and 1879, and the average for 10 years ending with 1879, at the Agricultural College, near Lansing, Michigan.



Scale = .055 to the inch.

Designed by Henry B. Baker

EXHIBIT 12.—PRESSURE OF THE ATMOSPHERE.—*Observations of Barometer reduced to freezing point, and corrected for instrumental error (+.12) previous to 1875, for each of the years 1870 to 1879, inclusive, and the Average for 10 years ending with 1879, at the Agricultural College, near Lansing, Michigan. (Based upon Observations made by Prof. R. C. Kedzie.)*

YEARS.	ANNU- AL AVER- AGE.	PRESSURE OF THE ATMOSPHERE, STATED IN INCHES OF MERCURIAL COLUMN, BY MONTHS.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1870..	28.996	28.987	28.927	28.965	29.022	28.977	29.000	28.956	29.010	29.142	29.059	29.023	28.892
1871..	28.938	29.023	28.936	28.930	28.842	29.024	28.985	29.011	29.027	29.158	29.029	29.084	29.000
1872..	29.007	28.958	28.962	29.031	28.972	28.988	28.999	29.044	29.087	29.010	29.099	29.001	29.112
1873..	28.994	28.993	28.967	28.972	28.918	28.946	28.960	29.034	29.047	29.048	29.037	28.953	29.049
1874..	29.055	29.168	29.048	29.015	29.061	28.984	28.998	29.027	29.044	29.066	29.073	29.057	29.121
1875..	28.998	29.005	28.875	28.944	29.047	29.061	29.029	29.044	29.025	29.031	29.016	29.054	28.955
1876..	29.010	29.073	29.063	28.929	29.000	29.009	28.911	29.009	29.048	28.995	28.929	28.953	29.203
1877..	29.066	29.057	29.124	28.981	28.974	29.056	29.020	29.062	29.046	29.121	29.077	29.099	29.180
1878..	29.053	29.099	29.026	29.027	28.875	29.013	29.030	29.065	29.010	29.157	29.080	29.081	29.147
1879..	29.080	29.130	29.107	29.102	29.050	29.116	29.073	29.057	29.100	29.152	29.160	29.027	29.033
Av.. ^a	29.025	29.049	29.004	28.980	28.976	29.017	29.001	29.033	29.044	29.088	29.056	29.033	29.069

^a Average for 10 years ending with 1879.

With the exception of the months of November and December, the average atmospheric pressure for each month of the year 1879 was greater than the average for ten years, being greatest in October. The curves illustrating these conditions are easily studied in diagram No. 8.

TABLE XXX.—*Exhibiting, for the Year, for each Month, and an Average Month, during the Year 1879, the Average Height and Range of Barometer, the Direction of the Prevailing Winds, the Relative Humidity, the Per Cent. of Cloudiness; the Number of Days on which it Rained or Snowed, and the Depth of Rain and Melted Snow, in Inches, at the Agricultural College near Lansing, Michigan.*

YEAR AND MONTHS, 1879.	Barometer, Reduced to 32° Fahrenheit,—Average.	DAYS OF PREVAILING WINDS, 1879.											Relative Humidity, or Per Cent. of Saturation,—Av erage.	Per Cent. of Cloudiness of Sky,—Average.	Number of Days on which it Rained or Snowed.	Rain and Melted Snow, in Inches.	OZONE— RELATIVE MAXIMUM = 10.	
		Range of Barometer.								West.	North-west.	Day,—7 A. M. to 2 P. M.					Night,—9 P. M. to 7 A. M.	
		North.	North-east.	East.	South-east.	South.	South-west.	North-west.										
Year, 1879.....	29.080	1.280	20	32	10	30	24	123	48	68	76	54	116	26.73	3.24	3.38		
January.....	29.130	.880	---	1	1	2	1	20	2	2	80	68	9	.49	4.00	4.48		
February.....	29.107	.964	---	3	---	4	1	3	5	12	92	73	14	1.43	4.54	5.01		
March.....	29.102	.796	---	2	---	5	1	12	2	8	78	56	6	1.57	3.93	4.30		
April.....	29.050	1.003	---	6	---	2	2	5	2	13	65	44	8	1.25	3.00	4.00		
May.....	29.116	.829	2	5	2	3	3	7	3	4	64	40	11	2.45	2.79	2.68		
June.....	29.073	.934	3	2	3	1	2	12	3	4	75	43	10	2.87	2.43	2.03		
July.....	29.057	.608	3	2	---	---	3	10	10	2	71	36	9	2.19	2.90	2.13		
August.....	29.100	.355	7	2	---	---	2	17	2	---	70	35	5	1.61	2.58	1.76		
September.....	29.152	.841	2	2	---	3	3	7	3	9	78	47	10	3.19	2.87	2.53		
October.....	29.160	1.078	2	2	---	1	3	14	1	6	76	55	6	1.57	3.32	2.81		
November.....	29.027	1.078	1	1	1	3	2	11	6	5	75	68	13	4.55	3.53	4.83		
December.....	29.032	.983	---	4	3	6	1	5	9	3	80	84	15	3.56	2.97	3.87		
Monthly Av.....	29.092	.862	1.67	2.67	.83	2.50	2.00	10.25	4.00	5.67	76	54	9.67	2.23	3.24	3.36		

TABLE XXXII.—Some Meteorological conditions at Certain Localities in Michigan, by Months, during the Year 1879.

YEAR AND MONTHS, 1879.	ALPENA, MICH.				DETROIT, MICH.				GRAND HAVEN, MICH.				MARQUETTE, MICH.			
	Average Barometer.	Average Temperature, Fahr.	Total Rain-fall, in Inches.	Prevailing Winds.	Average Barometer.	Average Temperature, Fahr.	Total Rain-fall, in Inches.	Prevailing Winds.	Average Barometer.	Average Temperature, Fahr.	Total Rain-fall, in Inches.	Prevailing Winds.	Average Barometer.	Average Temperature, Fahr.	Total Rain-fall, in Inches.	Prevailing Winds.
Year, 1879.....	29.340	42.39	39.94	S. E.	29.348	48.42	37.17	S. W.	29.339	48.08	35.35	S. W.	29.297	44.14	40.43	N. W.
January.....	29.312	20.66	1.63	W.	29.362	21.68	1.11	S. W.	29.335	25.10	1.81	S. W.	29.249	21.98	1.41	N. W.
February.....	29.369	14.12	3.17	N. W.	29.355	23.17	2.64	W.	29.383	23.57	1.86	N. W.	29.323	15.83	3.75	N. W.
March.....	29.362	25.37	1.05	S. E.	29.362	34.53	1.68	W.	29.300	34.73	1.19	W.	29.272	28.63	1.98	N. W.
April.....	29.329	36.74	2.19	S. E.	29.292	45.38	1.56	S. W.	29.337	44.32	1.49	N.	29.310	39.67	0.53	N. W.
May.....	29.379	52.22	1.74	S. E.	29.366	59.72	2.64	S. W.	29.373	58.34	2.46	N. W.	29.311	50.81	3.19	N. W.
June.....	29.317	60.17	3.07	N. W.	29.297	66.30	3.83	S. W.	29.331	64.56	2.42	S. W.	29.293	61.53	2.32	N. W.
July.....	29.277	69.57	3.77	S. E.	29.281	73.62	6.22	S. W.	29.301	72.70	2.61	S. W.	29.189	68.90	4.29	S. W.
August.....	29.307	65.25	3.71	N. W.	29.295	70.13	1.31	S. W.	29.316	68.89	2.47	S.	29.215	67.22	2.43	N. W.
September.....	29.377	55.54	8.00	W.	29.355	58.73	6.23	S. W.	29.403	53.31	6.01	S. W.	29.275	56.58	2.62	W.
October.....	29.397	51.22	1.92	S. E.	29.433	50.13	0.83	S. W.	29.439	68.06	2.58	S.	29.271	56.49	4.23	S. W.
November.....	29.267	32.79	5.35	W.	29.365	39.20	4.71	S. W.	29.364	39.40	7.33	E.	29.260	32.13	5.43	W.
December.....	29.387	22.08	3.74	W.	29.375	29.45	4.39	S. W.	29.372	29.00	3.22	W.	29.269	18.55	6.23	N. W.
Average Month.....	29.340	42.39	3.33	.....	29.348	48.42	3.10	.....	29.339	48.08	2.95	.....	29.297	43.14	3.37	.....

Table XXXII. is made from data obtained from the "Annual Report of the State Board of Health" for the year 1880.

EXHIBIT 13.—ALL CAUSES.—Deaths Returned as having occurred in Michigan from All Causes during the Years 1870-1879; Per Cent. of Deaths to the Estimated Population* in each Year, and some coincident Meteorological conditions, at the Agricultural College, near Lansing, Michigan, and near the center of the thickly-settled part of the State.

YEARS 1870-1879 IN ORDER BY PER CENT. OF REPORTED DEATHS FROM ALL CAUSES TO ESTIMATED INHABITANTS, YEAR OF GREATEST DEATH- RATE FIRST.	Estimated Inhabitants. ^a	DEATHS REPORTED.		TEMPERATURE.—FAHR.; MEAN OF 3 DAILY OBSERVATIONS.—7 A. M., 2 P. M., AND 9 P. M.			HUMIDITY OF ATMOSPHERE, ETC.— MONTHLY AVERAGE ^b .	OZONE.—RELA- TIVE. MAXIMUM = 10.		Rain and Melted Snow, in Inches.	PRESSURE OF ATMOS- PHERE. INCHES OF MERCURY. (REDUCED TO 32° F.)			
		Number.	Per Cent. of Deaths to Estimated Inhabitants.	AVERAGE RANGE.		Relative Humidity, or Per Cent. of Saturation.		Weight, in Grains, of Va- por in Cubic Foot of Air. ^c	RANGE OF BAROMETER.		Annual.	Average, Daily.		
				Daily.	From Day to Day, 2 P. M. to 2 P. M.				Day.—7 A. M. to 2 P. M.				Night.—9 P. M. to 7 A. M.	
More than the Av. Death-rate.	1,348,848	14,258	1.05	14.37	17.67	44.54	80	3.36	4.02	4.63	31.745	1.307	.141	28.874
1873.....	1,297,973	13,371	1.03	15.31	18.14	45.54	83	3.70	2.82	4.24	26.853	1.902	.123	28.887
1872.....	1,181,292	10,766	.91	17.11	19.03	49.10	81	3.90	.....	.....	37.757	1.366	.....	28.876
1870.....	1,432,578	12,500	.88	15.65	18.27	47.05	78	3.36	4.10	3.99	22.953	2.069	.130	28.935
1874.....	1,468,201	12,528	.86	15.15	17.78	46.60	80	3.50	3.69	4.02	30.165	2.032	.148	28.967
Average.....	1,559,145	12,576	.81	13.60	16.33	46.17	81	3.40	3.68	4.11	30.553	1.960	.138	29.010
Less than the Average	1,788,966	14,407	.81	14.87	17.24	46.88	76	3.43	3.24	3.36	26.780	1.289	.125	29.080
1876.....	1,489,297	11,966	.81	15.34	17.55	43.09	79	3.11	4.53	5.04	28.437	1.628	.306	29.003
1877.....	1,632,269	12,919	.79	15.12	17.53	47.42	80	3.45	3.66	3.33	37.420	1.539	.109	29.066
1871.....	1,289,825	9,728	.78	16.52	19.97	47.93	80	3.56	.....	.....	27.210	6.079	.....	28.884
1878.....	1,708,822	12,766	.75	13.63	16.05	48.29	79	3.69	3.80	3.42	31.990	1.276	.115	29.053

^a Population estimated from Censuses of 1860 and 1870.

^b Figures from Exhibit K, page 260.

* Exceptions to the proposition that the temperature was less than the average in years in which the death-rate was greater than the average, and vice versa.

EXHIBIT 14.—ALL CAUSES.—Deaths Returned as having occurred in Michigan from All Causes, by Months, during the Year 1879, and some coincident Meteorological conditions at the Agricultural College, near Lansing, Michigan, and near the center of the thickly-settled part of the State.

MONTHS IN ORDER BY NUMBER OF REPORTED DEATHS FROM ALL CAUSES, GREATEST FIRST.	DEATHS REPORTED FROM ALL CAUSES, 1879.								TEMPERATURE.—FAHR.; MEAN OF 3 DAILY OBSERVATIONS.— 7 A. M., 2 P. M., AND 9 P. M.			HUMIDITY OF ATMOSPHERE, ETC.—MONTHLY AVERAGES.		OZONE.—RELATIVE. MAXIMUM=10.		RAIN AND INCHES, Snow, in		PRESSURE OF ATMOSPHERE.— INCHES OF MERCURY. (Reduced to 32° F.)									
	NUMBER.				PER CENT. OF TOTAL.				AVERAGE RANGE.			Relative Humidity, or Per Cent. of Saturation.		Weight in Grains, of Vapor in Cu- bic Foot of Air.		Day,—7 A. M. to 2 P. M.		Night,—9 P. M. to 7 A. M.		Rain and Inches, Snow, in		Monthly, and Year.		Average, Daily.		Average Pressure.	
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Daily.	From Day to Day,— 7 P. M. to 2 P. M.	Average.	76	8.43	3.24	3.36	26.73	1.289	.125	29.080								
YEAR, 1879..... ^a	14,366	7,496	6,833	37	100.00	100.00	100.00	100.00	14.87	17.24	46.88	76	8.43	3.24	3.36	26.73	1.289	.125	29.080								
August.....	1,537	778	753	6	10.70	10.38	11.02	16.22	19.06	20.90	70.00	70	5.58	2.58	1.76	1.61	.355	.068	29.100								
Dec.....	1,521	771	748	2	10.59	10.29	10.95	5.41	8.39	27.46	80	1.70	2.97	3.87	3.56	.983	.210	29.032									
Sept.....	1,403	761	639	3	9.77	10.15	9.35	8.11	16.13	18.30	56.21	75	4.40	2.87	2.53	3.19	.841	.090	29.152								
October.....	1,286	692	591	3	8.95	9.23	8.65	8.11	15.23	17.90	57.28	76	4.61	3.32	2.81	1.57	1.078	.117	29.160								
Nov.....	1,268	662	604	2	8.83	8.83	8.84	5.41	10.87	12.67	38.22	75	2.46	3.53	4.63	4.55	1.078	.199	29.027								
Average.....	1,197	625	569	3	8.33	8.34	8.33	8.11	14.87	17.24	46.88	76	3.43	3.24	3.36	2.93	.862	.125	29.080								
July.....	1,183	612	567	4	8.23	8.16	8.30	10.81	16.81	18.90	74.03	71	6.30	2.90	2.13	2.19	.608	.073	29.057								
April.....	1,174	603	569	2	8.17	8.04	8.33	5.41	19.03	20.77	44.84	66	2.64	3.00	4.00	1.25	1.003	.108	29.050								
March.....	1,114	577	535	1	7.75	7.70	7.84	2.70	12.74	15.65	33.19	78	1.93	3.93	4.30	1.57	.796	.137	29.102								
May.....	1,083	564	515	4	7.54	7.52	7.54	10.51	18.68	21.52	58.76	64	3.94	2.79	2.68	2.45	.829	.093	29.116								
Feb.....	992	513	477	2	6.91	6.84	6.98	5.41	11.46	14.79	20.40	92	1.23	4.54	5.01	1.43	.964	.151	29.107								
Jan.....	903	495	404	4	6.29	6.60	5.91	10.81	13.39	14.65	19.19	89	1.31	4.00	4.48	1.49	.880	.153	29.130								
June.....	902	498	430	4	6.28	6.24	6.29	10.81	16.60	19.80	66.02	75	5.09	2.43	2.03	2.87	.934	.104	29.073								

^a See foot-note to Exhibit K, page 200. ^b Excluding Deaths in unknown month. ^c Exceptions to the proposition that the Range of Temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa. ^d Exceptions to the proposition that the Temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa. ^e Exceptions to the proposition that the Rain-fall was less than the average in months when more than the average number of deaths occurred, and vice versa. ^f Exceptions to the proposition that the Ozone was less than the average in months when more than the average number of deaths occurred, and vice versa. ^g Exceptions to the proposition that the Atmospheric Pressure, as indicated by the Barometer, was greater than the average in months when more than the average number of deaths occurred, and vice versa.

EXHIBIT K.—CROUP.—Deaths in Michigan from Croup, by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM CROUP, GREATEST FIRST.		DEATHS FROM CROUP, 1879.		Temperature, Fahr.; Mean of 3 Daily Observations,—7 A. M., 2 P. M., and 9 P. M.			HUMIDITY OF ATMOS- PHERE, ETC.,—MONTHLY AVERAGES.				OZONE,— RELATIVE. MAXIMUM= 10.		Average Pressure of Atmosphere. (Barometer Reduced to 32° Fahrenheit.)	
		Number.	Per Cent. of Total.	AVERAGE RANGE.			Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cu- bic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor inhaled by one person in 24 hours. ^b	Weight, in Troy Ounces, of Vapor exhaled from Air passages in 24 hours, in excess of vapor inhaled. ^c	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.		
				Daily.	From Day to Day,—2 P. M. to 2 P. M.	Average.								
Year, 1879		4278	100.00	14.57	17.24	45.88	76	3.43	2.14	9.54	3.24	3.36	26.73	29.080
More than Av. No. of Deaths.	December.....	43	15.47	8.39	11.00	27.46	80	1.70	1.06	10.02	2.97	3.87	3.56	29.033
	November.....	37	13.31	10.87	12.67	38.22	75	2.46	1.54	10.14	3.53	4.63	4.55	29.027
	January.....	31	11.15	13.39	14.65	19.19	89	1.31	.82	10.86	4.00	4.48	.49	29.130
	February.....	21	8.63	11.46	14.79	20.40	92	1.23	.77	10.91	4.54	5.01	1.43	29.107
Average.....		23.2	8.35	14.87	17.24	45.88	76	3.43	2.14	9.54	3.24	3.36	2.23	29.080
Less than the Average No. of Deaths.	April	23	8.27	19.03	20.77	44.84	66	2.64	1.65	10.03	3.00	4.00	1.25	29.030
	October	23	8.27	15.23	17.90	57.28	76	4.61	2.88	8.80	3.32	2.81	1.57	29.160
	March	20	7.19	12.74	15.65	33.19	78	1.93	1.21	10.47	3.93	4.30	1.57	29.102
	September...	18	6.47	16.13	18.30	56.21	78	4.40	2.75	8.93	2.87	2.53	3.19	29.152
	May	16	5.76	18.68	21.52	58.76	64	3.94	2.46	9.22	2.79	2.68	2.45	29.116
	June.....	16	5.76	16.60	19.80	66.02	75	5.09	3.18	8.50	2.43	2.03	2.87	29.073
	August.....	16	5.76	19.06	20.90	70.00	70	5.58	3.49	8.19	2.58	1.76	1.61	29.100
{ July		11	3.96	16.81	18.99	74.03	71	6.30	3.94	7.74	2.90	2.13	2.19	29.057

^a Data taken from the Report of the State Board of Health for 1880.

^b Calculated for 15 respirations per minute, of 20 cubic inches of air each.

^c Assuming the air exhaled to be saturated with vapor at the temperature of 98° F., each cubic foot containing 18.69 grains, 18 respirations per minute, of 20 cubic inches of air each, making 11.03 Troy ounces of vapor exhaled daily. No correction made for expansion of air after being inhaled.

^d Includes 45 deaths from Membranous Croup, and 1 from Spasmodic Croup.

^e Exceptions to the proposition that more than an average number of deaths from croup occurred in months when the temperature was less than the average, and vice versa.

^f Exceptions to the proposition that more than an average number of deaths from croup occurred in months in which there was less than the average quantity of vapor inhaled, and vice versa.

Croup.—Deaths from this cause in 1879 were almost entirely confined to children under 15 years of age, the greatest number occurring among children under the age of 5 years. The greatest number of deaths from croup occurred in the month of December, the next months in order being November, January and February. The least number of deaths from this disease occurred in July. About 1.9 per cent. more males died from this cause than females. Exhibit K enables the reader readily to observe what meteorological conditions

were coincident with the greatest and least number of deaths per month from croup in the year 1879.

Croup and Diphtheria.—These two diseases are grouped together from the supposition that they are essentially one disease. Exhibit L shows their relation, especially to the conditions of the propositions given in the foot-notes.

EXHIBIT L.—CROUP AND DIPHTHERIA.—Deaths in Michigan from Croup and Diphtheria, by Months, during the year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUM- BER OF DEATHS FROM CROUP AND DIPHTHERIA, GREATEST FIRST.		DEATHS FROM CROUP AND DIPHTHERIA, 1879.		Temperature,—Fahr.: Mean of Three Daily Observations,—7 A. M., 2 P. M., and 9 P. M.			HUMIDITY OF ATMOS- PHERE, ETC.,— MONTHLY AVERAGES.				OZONE,— RELATIVE. MAXIMUM = 10		Average Pressure of Atmosphere. (Barometer Reduced to 32° Fahr.)
		Number.	Per Cent. of Total.	AVERAGE RANGE.		Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one person in 24 hours. ^a	Weight, in Troy Ounces, of Vapor Exhaled from Air passages in 24 hours, in excess of vapor inhaled. ^a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.		
				Daily.	From Day to Day— 2 P. M. to 2 P. M.							Average.	
Year, 1879.....		1,749	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080
More than the Average No. of Deaths.	Dec.....	260	14.56	8.59	11.00	27.46	80	1.70	1.06	10.62	2.97	3.87	29.032
	Oct.....	255	14.58	15.23	17.90	b 57.28	76	4.61	c 2.88	8.80	3.32	2.81	29.160
	Nov.....	245	14.01	10.87	12.67	38.22	75	2.46	1.54	10.14	3.53	4.63	29.027
	Sept.....	198	11.32	16.13	18.30	b 56.21	78	4.40	c 2.75	8.03	2.87	2.53	29.152
	Aug.....	153	8.75	19.06	20.90	b 70.00	70	5.58	c 3.49	8.19	2.58	1.76	29.100
Average.....		145.8	8.34	14.87	17.24	46.58	76	3.43	2.14	9.54	3.24	3.36	29.080
Less than the Average No. of Deaths.	Jan.....	126	7.20	17.39	14.65	b 19.19	80	1.31	c .82	10.86	4.00	4.48	29.130
	April.....	104	5.95	19.03	20.77	b 44.84	66	2.64	c 1.65	10.03	3.00	4.00	29.050
	July.....	92	5.26	16.81	18.90	74.03	71	6.30	3.94	7.74	2.90	2.13	29.057
	March.....	88	5.03	12.74	15.65	b 33.19	78	1.93	c 1.21	10.47	3.93	4.30	29.102
	May.....	84	4.80	18.65	21.52	58.76	64	3.94	2.46	9.22	2.79	2.68	29.116
	Feb.....	72	4.12	11.46	14.79	b 20.40	92	1.23	c .77	10.91	4.54	5.01	29.107
June.....		72	4.12	16.60	19.80	66.02	75	5.09	3.18	8.50	2.43	2.03	29.073

* See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that *more* than an average number of deaths from Croup and Diphtheria occurred in months in which the mean temperature was *less* than the average, and *vice versa*.

^c Exceptions to the proposition that *more* than an average number of deaths from Croup and Diphtheria occurred in months in which there was *less* than the average quantity of vapor inhaled, and *vice versa*.

Diphtheria.—The deaths in 1879 from diphtheria numbered 1,473, or 10.22 per cent. of the whole number of deaths for that year. A considerably larger per cent. of females died from this cause than males, especially when we consider the ratio of population of males to females in the State. The greatest number of deaths occurred in the last quarter of the year; and, by far the greatest proportion of the deaths from this cause occurred among children under ten years of age. In Exhibit M there are five exceptions to the proposition referring to temperature, and five to those relating to the amount of vapor inhaled.

EXHIBIT M.—DIPHTHERIA.—Deaths Returned as having occurred in Michigan from Diphtheria, by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM DIPHTHERIA, GREATEST FIRST.	DEATHS FROM DIPHTHERIA, 1879.		TEMPERATURE.—FAHR.; MEAN OF THREE DAILY OBSERVATIONS,—7 A. M., 2 P. M., AND 9 P. M.			HUMIDITY OF ATMOSPHERE, ETC.,— MONTHLY AVERAGES.				OZONE.— RELATIVE. MAXIMUM =10.		Average Pressure of Atmosphere. (Barometer Reduced to 32° Fahr. —renset.)	
	Number.	Per Cent. of Total.	AVERAGE RANGE.		Average.	Relative Humidity, or Per Cent. of Saturation.	Weight in Grains, of Vapor in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one per- son in 24 hours. ^a	Weight, in Troy Ounces, of Vapor Exhaled from Air passages in 24 hours, in excess of vapor inhaled. ^a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.		
			Daily.	From Day to Day,— 2 P. M. to 2 P. M.									
Year, 1879.....	1,471	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080	
More than the Av. No. of Deaths.	October....	232	15.77	15.23	17.90	b 57.28	76	4.61	c 2.88	8.80	3.32	2.81	29.160
	December..	217	14.75	8.39	11.00	27.46	80	1.70	1.06	10.62	2.97	3.87	29.032
	November..	208	14.14	10.87	12.67	38.22	75	2.46	1.54	10.14	3.53	4.63	29.027
	September..	180	12.23	16.13	18.30	b 56.21	78	4.40	c 2.75	8.93	2.87	2.53	29.152
	August.....	137	9.31	19.06	20.90	b 70.00	70	5.58	c 3.49	8.19	2.58	1.76	29.100
Average.....	123	8.36	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080	
Less than the Average Number of Deaths.	January...	95	6.46	13.89	14.65	b 19.19	89	1.31	c .82	10.86	4.00	4.48	29.180
	April.....	81	5.51	19.03	20.77	b 44.84	66	2.64	c 1.65	10.03	3.00	4.00	29.059
	July.....	81	5.51	16.81	18.90	74.03	71	6.30	3.94	7.74	2.90	2.13	29.057
	May.....	68	4.62	18.68	21.52	58.76	64	3.94	2.46	9.22	2.79	2.68	29.116
	March.....	68	4.62	12.74	15.65	b 33.19	78	1.93	c 1.21	10.47	3.93	4.30	29.102
	June.....	56	3.81	16.60	19.80	66.02	75	5.09	3.18	8.50	2.43	2.03	29.077
	February..	48	3.28	11.46	14.79	b 20.40	92	1.23	c .77	10.91	4.54	5.01	29.167

^a See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that more than an average number of deaths occurred in months in which the temperature was less than the average, and vice versa.

^c Exceptions to the proposition that more than an average number of deaths occurred in months in which less than an average quantity of vapor was inhaled, and vice versa.

Cerebro-spinal Meningitis.—The returns of deaths show that of diseases having a probable relation to inflammation of the meninges, 101 deaths occurred in Michigan in 1879. Of this number 10 were returned as caused by cerebro-spinal meningitis. Exhibits V. and 15 combine the number of deaths from several similar causes. Under the term cerebro-spinal meningitis they are studied in Exhibit 15 in relation to climatological conditions, and with reference to certain propositions.

EXHIBIT V.—CEREBRO-SPINAL MENINGITIS, ETC.—*The Total Number of Deaths Returned as having occurred from Cerebro-spinal Meningitis, Spotted Fever, Spinal Meningitis, Meningitis, and Spinal Fever, in Michigan during the Year 1879, by Months, and by Sex.*

CAUSES OF DEATH.	SEX.	YEAR, 1879.	MONTHS, 1879.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Total.....	Total..	101	6	4	4	14	8	4	4	21	10	7	11	8
	Males..	51	3	2	2	5	1	2	3	13	5	5	6	4
	Fema's	50	3	2	2	9	7	2	1	8	5	2	5	4
Cerebro-spinal Meningitis	Total..	10	1	—	1	3	1	—	2	—	—	1	—	1
	Males..	5	1	—	1	—	—	—	1	—	—	1	—	1
	Fema's	5	—	—	—	3	1	—	1	—	—	—	—	—
Spotted Fever.....	Total..	1	—	—	—	—	—	—	—	1	—	—	—	—
	Males..	1	—	—	—	—	—	—	—	1	—	—	—	—
	Fema's	—	—	—	—	—	—	—	—	—	—	—	—	—
Spinal Meningitis	Total..	31	2	2	1	4	2	3	1	4	3	1	3	5
	Males..	16	1	1	—	2	1	2	1	2	2	1	—	3
	Fema's	15	1	1	1	2	1	1	—	2	1	—	3	2
Meningitis	Total..	12	1	—	1	3	2	—	—	1	2	—	2	—
	Males..	8	1	—	1	1	—	—	—	1	2	—	2	—
	Fema's	4	—	—	—	2	2	—	—	—	—	—	—	—
Spinal Fever.....	Total..	47	2	2	1	4	3	1	1	15	5	5	6	2
	Males..	21	—	1	—	2	—	—	1	9	1	3	4	—
	Fema's	26	2	1	1	2	3	1	—	6	4	2	2	2

EXHIBIT 15.—CEREBRO-SPINAL MENINGITIS, ETC.—Deaths Returned as having occurred in Michigan from Cerebro-spinal Meningitis, Spotted Fever, Spinal Meningitis, Meningitis, and Spinal Fever, by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS, FROM CEREBRO-SPINAL MENINGITIS, SPOTTED FEVER, SPINAL MENINGITIS, MENINGITIS, AND SPINAL FEVER, GREATEST FIRST.	Deaths from Cerebro-Spinal Meningitis, etc., 1879.		Temperature.—Fabr.; Mean of Three Daily Observations,—7 A. M., 2 P. M. and 9 P. M.			Humidity of Atmosphere, Etc.—Monthly Averages.		Ozone,—Relative. Maximum = 10.		Rain and Melted Snow, in Inches.	Pressure of Atmosphere. Inches of Mercury. (Reduced to 32° F.)			
	Number.	Per Cent. of Total.	Average Range.		Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cubic Foot of Air. ^a	Day,—7 A. M. to 2 P. M.	Night,—0 P. M. to 7 A. M.	Range of Barometer.		Average Pressure.			
			Daily.	From Day to Day—2 P. M. to 2 P. M.					Monthly, and Year.			Average, Daily.		
													Average.	
Year, 1879...	101	100.00	14.87	17.24	46.88	76	3.43	3.24	3.36	26.73	1.229	.125	29.080	
More than Av. No. of Deaths.	Aug. ...	21	20.79	19.06	20.90	d 70.00	70	5.58	2.58	1.76	1.61	.355	.068	29.100
	April...	14	13.86	19.03	20.77	44.84	66	2.64	3.00	4.00	1.25	1.003	.108	29.050
	Nov....	11	10.89	b 10.87	c 12.67	38.22	75	2.46	3.53	4.63	4.53	1.078	.199	29.027
	Sept. ...	10	9.90	16.13	18.30	d 56.21	e 78	4.40	2.87	2.53	3.19	.841	.080	29.152
Average	8.4	8.32	14.87	17.24	46.88	76	3.43	3.24	3.36	2.23	.862	.125	29.080	
Less than the Av. No. of Deaths.	May...	8	7.92	b 18.68	c 21.52	58.76	e 64	3.94	2.79	2.68	2.45	.829	.083	29.116
	Dec....	8	7.92	8.39	11.00	d 27.46	80	1.70	2.97	3.87	3.56	.983	.210	29.032
	Oct....	7	6.93	b 15.23	c 17.90	57.28	76	4.61	3.32	2.81	1.57	1.078	.117	29.100
	Jan....	6	5.94	13.39	14.63	d 19.19	89	1.31	4.00	4.48	.49	.830	.153	29.120
	Feb....	4	3.96	11.46	14.79	d 20.40	92	1.23	4.54	5.01	1.43	.964	.151	29.107
	March...	4	3.96	12.74	15.65	d 33.19	78	1.93	3.93	4.30	1.57	.796	.137	29.102
	June...	4	3.96	b 19.60	c 19.80	66.02	e 75	5.09	2.43	2.03	2.87	.934	.104	29.073
July...	4	3.96	b 16.81	c 18.90	74.03	e 71	6.30	2.90	2.13	2.19	.608	.073	29.057	

^a See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that the Daily Range of Temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^c Exceptions to the proposition that the Range of Temperature "from day to day" was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^d Exceptions to the proposition that the Temperature was lower than the average in months when more than the average number of deaths occurred, and vice versa.

^e Exceptions to the proposition that the Relative Humidity was less than the average in months in which more than the average number of deaths occurred, and vice versa.

^f Exceptions to the proposition that the Absolute Humidity was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^g Exceptions to the proposition that the Ozone was less than the average in months when more than the average number of deaths occurred, and vice versa.

^h Exceptions to the proposition that the Atmospheric Pressure indicated by the barometer, was less than the average in months in which more than the average number of deaths occurred, and vice versa.

Cephalitis.—The number of deaths returned in 1879 as caused by this disease was 222. The months in which cephalitis was most fatal were March and September. Propositions relating to this cause of death in its connection with meteorological conditions are shown in Exhibit 22. An equal number of deaths from this disease occurred among males and females. The period at which most deaths occurred from it was in infancy and childhood, 66 per cent. occurring before the age of 5 years.

EXHIBIT 22.—CEPHALITIS.—Deaths Returned as having occurred in Michigan, from Cephalitis, by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM CEPHALITIS, GREATEST FIRST.	Deaths from Cephalitis, 1879.		Temperature,—Fabr.; Mean of Three Daily Observations, 7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmosphere, Etc.,—Monthly Averages.				Ozone,— Relative. Maximum = 10.		Rain-fall in Inches.	Average Pressure of Atmosphere. (Barometer Reduced to 32° Fahr.)	
	Number.	Per Cent of Total.	Average Range.		Average.	Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Va- por in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor inhaled by one per- son in 24 hours. ^a	Weight, in Troy Ounces, of Vapor exhaled from Air passages in 24 hours, in excess of vapor inhaled. ^a	Day,— 7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.			
			Dally.	From Day to Day, 2 P. M. to 2 P. M.										
Year, 1879.....	222	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.42	3.36	26.73	29.080	
More than the Av. No. of Deaths.	March.....	27	12.16	b 12.74	c 15.65	d 33.19	e 78	f 1.93	1.21	10.47	g 3.93	g 4.30	1.57	29.102
	September	26	11.71	16.13	18.30	56.21	e 78	4.40	2.75	8.93	2.87	2.53	3.19	29.152
	August....	23	10.36	19.06	20.90	70.00	70	5.58	3.49	8.19	2.58	1.76	1.61	29.160
	October....	21	9.46	15.23	17.90	57.28	76	4.61	2.88	8.80	g 3.32	2.81	1.57	29.160
	April.....	20	9.01	19.03	20.77	d 44.84	66	f 2.64	1.65	10.03	3.00	g 4.00	1.25	29.105
Average.....	19	8.56	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	2.23	29.080	
Less than Average Num- ber of Deaths.	November	18	8.11	10.87	12.67	38.22	e 75	2.46	1.54	10.14	3.53	4.63	4.55	29.027
	December.	18	8.11	8.39	11.00	27.46	80	1.70	1.06	10.62	g 2.97	3.87	3.56	29.032
	July.....	17	7.66	b 16.81	c 18.90	d 74.03	e 71	f 6.30	3.94	7.74	g 2.90	g 2.13	2.19	29.067
	January..	15	6.76	13.39	14.63	19.19	89	1.31	.82	10.86	4.00	4.48	.49	29.130
	February.	14	6.31	11.46	14.79	20.40	92	1.23	.77	10.91	4.54	5.01	1.43	29.107
	May.....	12	5.41	b 18.68	c 21.52	d 58.76	e 64	f 3.94	2.46	9.22	g 2.79	g 2.68	2.45	29.116
June.....	11	4.95	b 16.60	c 19.80	d 66.02	e 75	f 5.69	3.18	8.50	g 2.43	g 2.03	2.87	29.073	

* See foot-notes to Exhibit K, page 260.

b Exceptions to the proposition that the Daily Range of Temperature was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

c Exceptions to the proposition that the Range of Temperature "from day to day" was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

d Exceptions to the proposition that the Temperature was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

e Exceptions to the proposition that the Relative Humidity was *less* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

f Exceptions to the proposition that the Absolute Humidity was *greater* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

g Exceptions to the proposition that the Ozone was *less* than the average in months when *more* than the average number of deaths occurred, and *vice versa*.

Congestive Chills and Intermittent Fever.—The greatest number of deaths caused by congestive chills and intermittent fever occurred in the month of August, being nearly twice as great as that of any other month. Exhibits U and W show, respectively, the number and per cent. of deaths from these causes and their relation to certain meteorological conditions. Sixty-four deaths were caused by congestive chills in 1879, and forty-six by intermittent fever.

EXHIBIT U.—CONGESTIVE CHILLS.—Deaths Returned as having occurred in Michigan from Congestive Chills by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUM- BER OF DEATHS FROM CONGES- TIVE CHILLS, GREATEST FIRST.	Deaths from Congestive Chills, 1879.		Temperature, Fahr.: Mean of 3 daily observations, 7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmosphere, Etc.—Monthly Averages.				Ozone,—Relative. Maximum = 10.		Rain and Melted Snow, in Inches.	Pressure of Atmosphere. Inches of Mercury. (Reduced to 32° F.)			
	Number.	Per Cent. of Total.	Average Range.		Average.	Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one person in 24 hours. ^a	Weight, in Troy Ounces, of Vapor exhaled from Air passages in 24 hours, in excess of vapor inhaled. ^a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.		Range of Barometer.		Average Pressure.	
			Daily.	From Day to Day, 2 P. M. to 2 P. M.									Monthly, and Year.	Average, Daily.		
Year, 1879.	64	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	20.73	1.289	.125	29.080	
More than the Av. No. of Deaths.	Aug...	13	20.31	19.06	20.90	70	5.58	3.49	8.19	2.58	1.76	1.61	h. 355	i. 068	29.100	
	Oct...	7	10.93	15.23	17.90	57.28	76	4.61	2.88	8.80	f 3.32	2.81	1.57	1.078	i. 117	29.160
	Feb...	6	9.38	b 11.46	c 14.79	d 20.40	92	e 1.23	.77	10.91	f 4.54	f 5.01	1.43	.964	.151	29.107
	Sept...	6	9.38	16.13	18.30	56.21	78	4.40	2.75	8.93	2.87	2.53	3.19	h. 841	i. 090	29.153
	Nov...	6	9.38	b 10.87	c 12.67	d 38.22	75	e 2.46	1.54	10.14	f 3.53	f 4.63	4.55	1.078	.199	g 29.027
	Dec...	6	9.38	b 8.39	c 11.00	d 27.46	80	e 1.70	1.06	10.62	2.97	f 3.87	3.56	.983	.210	g 29.032
Average....	5.3	8.28	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	2.23	.862	.125	29.080	
Less than the Av. No. of Deaths.	Mar...	5	7.81	12.74	15.65	33.19	78	1.93	1.21	10.47	3.93	4.30	1.57	.796	i. 137	g 29.102
	June...	5	7.81	b 16.60	c 19.80	d 66.02	75	e 5.09	3.18	8.50	f 2.43	f 2.03	2.87	h. 934	.104	29.673
	Apr...	4	6.25	b 19.03	c 20.77	44.84	66	2.64	1.65	10.03	f 3.00	4.00	1.25	h. 1.003	.108	29.050
	May...	3	4.68	b 18.68	c 21.52	d 58.76	64	e 3.94	2.46	9.22	f 2.79	f 2.63	2.45	.829	.093	g 29.116
	Jan...	2	3.13	13.39	14.65	19.19	89	1.31	.82	10.86	4.00	4.48	.49	h. 880	i. 153	g 29.130
	July...	1	1.56	b 16.51	c 18.90	d 74.03	71	e 6.30	3.94	7.74	f 2.90	f 2.13	2.19	.608	.073	29.057

^a See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that the Daily Range of Temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^c Exceptions to the proposition that the Range of Temperature "from day to day" was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^d Exceptions to the proposition that the temperature was higher than the average in months when more than the average number of deaths occurred, and vice versa.

^e Exceptions to the proposition that the Absolute Humidity was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^f Exceptions to the proposition that the Ozone was less than the average in months when more than the average number of deaths occurred, and vice versa.

^g Exceptions to the proposition that the Atmospheric Pressure indicated by the Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^h Exceptions to the proposition that the Range of Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

ⁱ Exceptions to the proposition that the Average Daily Range of Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

EXHIBIT W.—INTERMITTENT FEVER.—Deaths returned as having occurred in Michigan from Intermittent Fever, by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUM- BER OF DEATHS FROM INTER- MITTENT FEVER, GREATEST FIRST.	Deaths from Inter- mittent Fever, 1879.		Temperature, Fahr.; Mean of 3 daily ob- servations, 7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmos- phere, Etc.,—Monthly Averages.			Ozone,—Rel- ative. Maximum = 10.		Rain and Melted Snow, in Inches.	Pressure of Atmos- phere. Inches of Mercury. (Reduced to 32° F.)			
	Number.	Per Cent. of Total.	Average Range.		Average.	Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cu- bic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one person in 24 hours. ^a	Weight, in Troy Ounces, of Vapor exhaled from Air passages in 24 hours in excess of vapor inhaled. ^a	Day,—7 A. M. to 2 P. M.		Night,—9 P. M. to 7 A. M.	Range of Barometer.		
			Daily.	From Day to Day,—2 P. M. to 2 P. M.									Monthly, and Year.	Average, Daily.	Average Pressure.
Year, 1879.	46	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	26.73	1.280	.125	29.080
More than the Av. No. of Deaths.	Aug..	8	17.39	19.06	20.90	70	5.58	3.49	8.19	2.58	1.76	1.61	h. 355	1.068	29.100
	May..	6	13.04	18.08	21.52	64	3.94	2.46	9.22	2.79	2.68	2.45	h. 829	1.093	29.116
	Sept..	6	13.04	16.13	18.30	78	4.40	2.75	8.93	2.87	2.53	3.19	h. 841	1.090	29.152
	Dec..	5	10.87	b 8.39	c 11.00	80	e 1.70	1.06	10.02	2.97	f 3.87	3.56	.983	.210	g 29.032
	April	4	8.70	19.03	20.77	66	e 2.64	1.65	10.03	3.00	f 4.00	1.25	1.003	1.108	g 29.050
	June.	4	8.70	16.60	19.80	75	5.09	3.18	8.50	2.43	2.03	2.87	.934	1.104	g 29.073
Average...	4	8.70	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	2.23	.862	.125	29.080
Less than the Average No. of Deaths.	Mar..	3	6.52	12.74	15.65	78	1.93	1.21	10.47	3.93	4.30	1.57	.796	1.137	g 29.102
	July..	3	6.52	b 16.81	c 18.90	71	e 6.30	3.94	7.74	f 2.50	f 2.13	2.19	.608	.073	29.057
	Oct...	3	6.52	b 15.23	c 17.90	76	e 4.61	2.88	8.80	3.32	f 2.81	1.57	h 1.078	.117	g 29.160
	Jan...	2	4.35	13.39	14.65	89	1.31	.82	10.86	4.00	4.48	.49	h .880	1.153	g 29.130
	Nov...	2	4.35	10.87	12.67	75	2.46	1.54	10.14	3.53	4.63	4.55	h 1.078	1.199	29.027
	Feb..	-----	-----	11.46	14.79	90.40	92	1.23	.77	10.91	4.54	5.01	1.43	h .964	1.151	g 29.107

^a See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that the Daily Range of Temperature was greater than the average in months where more than the average number of deaths occurred, and vice versa.

^c Exceptions to the proposition that the Range of Temperature "from day to day" was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^d Exceptions to the proposition that the Temperature was higher than the average in months when more than the average number of deaths occurred, and vice versa.

^e Exceptions to the proposition that the Absolute Humidity was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^f Exceptions to the proposition that the Ozone was less than the average in months when more than the average number of deaths occurred, and vice versa.

^g Exceptions to the proposition that the Atmospheric Pressure indicated by the Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^h Exceptions to the proposition that the Range of Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

ⁱ Exceptions to the proposition that the Average Daily Range of Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

Typhoid Fever.—Three hundred and ninety-seven (397) deaths from typhoid fever were returned for the year 1879, the greatest number occurring in October.

In the foot-notes to Exhibit X. will be found statements concerning the relation of meteorological conditions to this cause of death.

EXHIBIT X.—TYPHOID FEVER.—Deaths Returned as having occurred in Michigan from Typhoid Fever, by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM TYPHOID FEVER, GREATEST FIRST.	Deaths from Typhoid Fever, 1879.		Temperature, Fahr.; Mean of Three Daily Observations, 7 A. M., 2 P. M. and 9 P. M.			Humidity of Atmosphere, Etc.—Monthly Averages.				Ozone,—Relative. Maximum = 10.		Pressure of Atmosphere. Inches of Mercury. (Reduced to 32° F.)				
	Number.	Per Cent. of Total.	Average Range.		Average.	Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one person in 24 hours. ^a	Weight, in Troy Ounces, of Vapor Exhaled from Air passages in 24 hours in excess of vapor inhaled. ^a	Day, 7 A. M. to 2 P. M.	Night, 9 P. M. to 7 A. M.	Rain and Melted Snow, in Inches.	Range of Barometer.		Average Pressure.	
			Daily.	From Day to Day,—2 P. M. to 2 P. M.									Monthly, and Year.	Average, Daily.		
Year, 1879...	397	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	26.73	1.259	.125	29.080	
More than the Av. No. of Deaths.	{ Oct...	61	15.37	15.23	17.90	57.28	76	4.61	2.88	8.80	f 3.32	2.81	1.57	1.078	^a .117	29.160
	{ Nov...	55	13.85	b 10.87	c 12.67	d 38.92	75	e 2.46	1.54	10.14	f 3.53	f 4.63	4.55	1.078	.199	29.027
	{ Sept...	53	13.35	16.13	18.30	56.21	78	4.40	2.75	8.93	2.87	2.53	3.19	^b .841	^a .090	29.152
	{ Dec...	52	13.10	b 8.39	c 11.00	d 27.46	80	e 1.70	1.06	10.62	2.97	f 3.87	3.56	.983	.210	29.032
	{ Aug...	48	12.09	19.06	26.90	70.00	70	5.58	3.49	8.19	2.58	1.76	1.61	^b .355	^a .005	29.100
Average....	33	8.31	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	2.23	.862	.125	29.080	
Less than the Average Number of Deaths.	{ Feb...	24	6.05	11.46	14.79	20.40	92	1.23	.77	10.91	4.54	5.01	1.43	^b .964	^a .151	29.107
	{ Mar...	24	6.05	12.74	15.65	33.19	78	1.93	1.21	10.47	3.93	4.30	1.57	.796	^a .137	29.102
	{ April...	23	5.79	^b 19.03	c 20.77	d 44.84	66	2.64	1.65	10.03	f 3.00	4.00	1.25	^b 1.003	.108	29.050
	{ July...	18	4.53	^b 16.81	c 18.90	d 71.03	71	e 6.30	3.94	7.74	f 2.90	f 2.13	2.19	.608	.073	29.057
	{ Jan...	15	3.78	13.39	14.65	19.19	89	1.31	.82	10.86	4.00	4.48	.49	^b .880	^a .133	29.130
	{ May...	13	3.27	^b 18.68	c 21.52	d 58.76	64	e 3.94	2.46	9.22	f 2.79	f 2.68	2.45	.829	.093	29.116
{ June...	11	2.77	^b 16.60	c 19.80	d 66.02	75	e 5.09	3.18	8.50	f 2.43	f 2.03	2.87	^b .964	.104	29.073	

^a See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that the Daily Range of Temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^c Exceptions to the proposition that the Range of Temperature "from day to day" was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^d Exceptions to the proposition that the Temperature was higher than the average in months when more than the average number of deaths occurred, and vice versa.

^e Exceptions to the proposition that the Absolute Humidity was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^f Exceptions to the proposition that the Ozone was less than the average in months when more than the average number of deaths occurred, and vice versa.

^g Exceptions to the proposition that the Atmospheric Pressure, as indicated by the Barometer, was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^h Exceptions to the proposition that the Range of Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

ⁱ Exceptions to the proposition that the Average Daily Range of Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

EXHIBIT 16.—DIARRHEA.—Deaths in Michigan from Diarrhea in July and August of each of the Years 1874-1879, the Average for Six Years ending with 1879, and some coincident Meteorological conditions, at the Agricultural College, near the center of the thickly-settled part of the State.

JULY AND AUGUST OF EACH OF THE YEARS 1874-1879.				Number of Deaths from Diarrhea.	Temperature.—F.; Mean of 3 Daily Ob- servations,—7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmosphere, Etc.— Monthly Averages.			Ozone.— Relative. Maximum =10.		Rain and Melted Snow, in Inches.	Pressure of Atmosphere. Inches of Mercury. (Reduced to 32° F.)		
					Average Range.		Relative Humidity, or Per Cent. of Satur- ation.	Weight, in Grains, of Vapor in Cubic Foot of Air. ^a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.	Range of Barometer.			Average Pressure.		
					Daily.	From Day to Day,—2 P. M. to 2 P. M.					Average.	Monthly.			Average, Daily.	
Average ..	July	59	16.39	19.15	72.30	74	6.42	2.46	2.16	2.871	.536	.155	29.000			
	August	95	17.50	19.78	69.47	77	6.01	2.64	1.75	2.379	.488	.139	29.006			
1874	July	61	17.68	21.35	72.02	71	6.00	1.80	1.50	2.560	.465	.078	28.907			
	August	104	17.23	19.21	69.39	74	5.75	2.80	1.10	1.278	.503	.065	28.924			
1875	July	56	16.26	18.26	69.67	78	5.91	3.52	3.22	2.420	.584	.606	29.044			
	August	80	16.90	18.61	65.48	77	5.22	3.50	3.70	1.470	.806	.652	29.025			
1876	July	69	15.87	17.90	72.48	78	6.76	2.16	1.58	2.100	.507	.070	29.009			
	August	98	17.74	20.97	71.55	76	6.31	1.97	1.26	1.280	.459	.061	29.048			
1877	July	55	18.39	20.42	71.43	70	5.76	2.71	1.77	2.250	.655	.088	29.062			
	August	96	17.45	19.48	68.46	78	5.74	3.42	1.03	6.570	.401	.056	29.046			
1878	July	39	14.32	18.10	73.04	68	6.83	2.10	1.74	2.960	.611	.068	29.085			
	August	47	17.71	19.74	70.15	74	6.06	2.32	1.52	1.850	.434	.065	29.010			
1879	July	44	16.81	18.90	74.03	71	6.30	2.90	2.13	2.190	.608	.073	29.057			
	August	82	19.06	20.90	70.00	70	5.58	2.58	1.76	1.610	.355	.068	29.100			

^a See foot-notes to Exhibit K, page 260.

^c Exceptions to the proposition that the Average Daily Range of Temperature was *less* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

^d Exceptions to the proposition that the Average Range of Temperature "from day to day" was *less* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

^e Exceptions to the proposition that the Average Temperature was *higher* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

^f Exceptions to the proposition that the amount of rain and melted snow was *greater* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

^g Exceptions to the proposition that the Average Relative Humidity was *greater* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

^h Exceptions to the proposition that the Absolute Humidity was *greater* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

ⁱ Exceptions to the proposition that the Day or Night Ozone was *less* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

^j Exceptions to the proposition that the Atmospheric Pressure was *more* than the average for July or August in months of July or August when *more* than the average number of deaths from Diarrhea occurred, and *vice versa*.

Diarrhea.—Two hundred and twenty-six deaths from diarrhea were returned as having occurred in Michigan in 1879, the largest per cent. of deaths from this cause occurring in August; the next largest in July.

Exhibit 16 permits a study of this disease in its relation to certain atmospheric conditions for the months of July and August, for the years 1874-1879.

Exhibit 21 shows the meteorological conditions coincident with diarrhea for each month of the year, and Table XXI. permits of a study of both diarrhea and dysentery with coincident atmospheric conditions. It is a noteworthy fact that no deaths from dysentery were returned for the month of March in 1879.

EXHIBIT 21.—DIARRHEA.—Deaths Returned as having occurred in Michigan from Diarrhea, by Months, during the Year 1879, and some coincident Meteorological conditions at the Agricultural College, near Lansing, Michigan.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM DIARRHEA, GREATEST FIRST.	Deaths from Diarrhea, 1879.		Temperature,— Degrees Fahr.			Inches of Rain and Melted Snow.	Humidity of Atmosphere. Av. of Obs. at 7 A. M., 2 P. M., and 9 P. M., daily.		Ozone, Relative.—Scale of 10 Degrees of Colora- tion.		Average Velocity of Wind, Miles per Hour, By Registering Anemometer. ^b	Pressure of Atmosphere. Inches of Mercury. (Reduced to 32° F.) .			
	Number.	Per Cent. of Total.	Range. Av. Daily, and for Year.				Relative Humidity, or Per Cent. of Saturation.	Absolute Humidity.—Grains of Vapor in a Cubic Foot of Air. ^a	Day Observation,—7 A. M. to 2 P. M.	Night Observation,—9 P. M. to 7 A. M.		Range of Barometer.		Average Pressure.	
			Of Observations at 7 A. M., 2 P. M., and 9 P. M., Daily.	During Day and Follow- ing Night, by Register- ing Thermometer, Obs. at 7 A. M.	Average of Daily Observations at 7 A. M., 2 P. M., and 9 P. M.							Monthly, and for Year.	Average Daily Range of Observations at 7 A. M., 2 P. M., and 9 P. M.		
Year 1879.....	226	100.00	14.87	23.11	46.88	26.73	76	3.43	3.24	3.36	9.7	1.289	.125	29.080	
More than the Av. No. of Deaths.	Aug...	82	36.28	19.06	30.10	70.00	1.61	70	5.58	2.58	1.76	8.4	1.355	k .068	29.100
	July...	44	19.47	16.81	28.78	74.03	2.19	71	6.30	2.90	2.13	8.6	1.608	k .073	29.057
	Sept...	31	13.72	16.13	24.13	56.21	3.19	e 78	4.40	2.87	2.53	10.0	1.841	k .090	29.152
	Oct...	20	8.85	15.23	e 20.80	57.28	1.57	76	4.61	g 3.32	2.81	10.2	1.078	k .117	29.160
Average.....	19	8.41	14.87	23.11	46.88	2.23	76	3.43	3.24	3.36	9.7	.862	.125	29.080	
Less than the Average No. of Deaths.	June...	14	6.19	e 16.60	e 27.40	d 66.02	2.87	e 75	f 5.09	g 2.43	h 2.03	i 6.8	1.934	.104	29.073
	March...	8	3.54	12.74	17.44	33.19	1.57	78	1.93	3.92	4.30	12.4	.796	k .137	29.102
	Nov...	8	3.54	10.87	16.43	38.22	4.55	e 75	2.46	3.53	4.63	12.2	1.078	k .199	29.027
	May...	6	2.65	e 18.68	e 28.58	458.76	2.45	e 64	f 3.94	g 2.79	h 2.63	i 7.4	.829	.093	29.116
	Dec...	5	2.21	8.39	14.71	27.43	3.56	80	1.70	g 2.97	3.87	11.3	1.933	k .210	29.032
	Feb...	3	1.33	11.46	17.63	20.40	1.43	92	1.23	4.54	5.01	....	1.964	k .151	29.107
	April...	3	1.33	e 19.03	e 25.93	44.84	1.25	e 66	2.64	g 3.00	4.00	19.6	1.003	.108	29.050
Jan....	2	.88	13.39	16.48	19.19	.49	89	1.31	4.00	4.48	....	1.880	k .153	29.130	

^a See foot-notes to Exhibit K, page 260.

^b The observations of the Velocity of the Wind were made at the office of the State Board of Health, Lansing.

* Exceptions to the proposition that more than an average number of deaths from Diarrhea occurred in months when the Average Daily Range of Temperature was greater than the average, and vice versa.

* Exceptions to the proposition that more than an average number of deaths from Diarrhea

[Foot notes to Exhibit 21 continued at bottom of page 271.]

TABLE XXI.—DIARRHEA AND DYSENTERY.—*Exhibiting for the State and for Eleven Geographical Divisions of the State, during the Year 1879, the Number of Deaths Returned as having occurred from Diarrhea and from Dysentery, and the Per Cent. of Deaths from each Disease to Deaths from All Causes.*

STATE AND GEOGRAPHICAL DIVISIONS.*	DIARRHEA, 1879, ACUTE AND CHRONIC.		DYSENTERY, 1879, ACUTE AND CHRONIC.	
	Number of Deaths, 1879.	Per Cent. to Deaths from All Causes, by Geograph- ical Divis- ions.	Number of Deaths, 1879.	Per Cent. to Deaths from All Causes, by Geograph- ical Divis- ions.
STATE.....	226	1.57	135	.94
Upper-peninsular.....	12	1.79	7	1.04
Northwestern.....	7	2.05	7	2.05
Northern.....	2	.90		
Northeastern.....	6	3.49		
Western.....	28	1.62	28	1.62
Northern-central.....	6	1.72	6	1.72
Bay and Eastern.....	52	2.35	19	.86
Central.....	17	.78	36	1.65
Southwestern.....	6	.55	5	.46
Southern-central.....	14	.64	14	.56
Southeastern.....	74	.25	13	.44

* For counties included in each Division, see page 162.

occurred in months when the Average Daily Temperature was *higher* than the average, and *vice versa*.

* Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Relative Humidity of the Atmosphere was *less* than the average, and *vice versa*.

f Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Absolute Humidity of the Atmosphere was *greater* than the average, and *vice versa*.

g Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Amount of Ozone in the Atmosphere, as indicated by the Day observations, was *less* than the average, and *vice versa*.

h Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Amount of Ozone in the Atmosphere, as indicated by the Night observations, was *less* than the average, and *vice versa*.

i Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Velocity of the Wind was *less* than the average, and *vice versa*.

j Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Monthly Range of Barometer was *greater* than the average, and *vice versa*.

k Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Average Daily Range of Barometer was *greater* than the average, and *vice versa*.

l Exceptions to the proposition that *more* than an average number of deaths from Diarrhea occurred in months when the Average Daily Pressure of the Atmosphere was *greater* than the average, and *vice versa*.

Rheumatism.—For each season of the year 1879, there was about an equal number of deaths from rheumatism. The greatest number of deaths occurred in June, July, August, and December, nine deaths being returned for each month. Although the number of deaths from this disease is so small, some information may be gained by a study of their relation to coincident meteorological conditions as given in Exhibit 19.

EXHIBIT 19.—RHEUMATISM.—Deaths returned as having occurred in Michigan from Rheumatism, by Months, during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM RHEU- MATISM,* GREATEST FIRST.	Deaths.		Temperature, Fahr.; Mean of Three Daily Observations,— 7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmosphere, Etc.,— Monthly Averages.				Ozone, — Relative. Maximum = 10.		Pressure of Atmos- phere. Inches of Mercury. (Reduced to 32° Fahr.)			
	Number.	Per Cent. of Total.	Average Range.			Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one person in 24 hours. ^a	Weight, in Troy Ounces, of Vapor Exhaled from Air passages in 24 hours in excess of vapor inhaled. ^a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.	Range of Barometer.			
			Daily.	From Day to Day,—2 P. M. to 2 P. M.	Average.							Monthly, and Year.	Average, Daily.	Average Pressure.	
Year, 1879.....	81	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	1.289	.125	29.080	
More than the Av. Number of Deaths.	June.....	9	11.11	18.60	19.80	66.02	75	5.09	3.18	8.50	2.43	2.03	.934	.104	29.073
	July.....	9	11.11	16.81	18.90	74.03	71	6.30	3.94	7.74	2.90	2.13	.608	.073	29.057
	Aug.	9	11.11	19.06	20.90	70.00	70	5.58	3.49	8.19	2.58	1.76	.355	.068	29.100
	Dec.....	9	11.11	8.39	11.00	27.46	80 ^b	1.70	1.06	10.62	2.97	3.87	.983	.210	29.032
	Jan.	7	8.64	13.39	14.63	19.19	80 ^b	1.31	.82	10.86	4.00	4.48	.890	.153	29.130
	Nov.....	7	8.64	10.87	12.67	33.22	75 ^b	2.46	1.54	10.14	3.53	4.63	1.078	.199	29.027
Average.....	7	8.40	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	.862	.125	29.080	
Less than the Av. No. of Deaths.	April....	6	7.41	19.03	20.77	44.84	66	2.64	1.65	10.03	3.00	4.00	1.003	.108	29.050
	Sept.....	6	7.41	16.13	18.30	56.21	78 ^b	4.40	2.75	8.93	2.87	2.53	.841	.090	29.152
	March....	5	6.17	12.74	15.65	33.19	78	1.93	1.21	10.47	3.93	4.30	.796	.137	29.102
	May.....	5	6.17	18.63	21.52	58.76	64 ^b	3.94	2.46	9.22	2.79	2.68	.829	.093	29.116
	Oct.....	5	6.17	15.23	17.90	57.28	76 ^b	4.61	2.88	8.80	3.32	2.81	1.078	.117	29.100
	Feb.....	4	4.94	11.46	14.79	20.40	92	1.23	.77	10.91	4.54	5.01	.964	.151	29.107

* Includes Rheumatism of Heart, Inflammatory, Sciatic, and Spinal Rheumatism.

^a See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that the air contains more than the average amount of vapor of water in months when more than the average number of deaths from Rheumatism occurred, and vice versa.

^c Exceptions to the proposition that there was less than the average Ozone in the air in months when more than the average number of deaths from Rheumatism occurred, and vice versa.

^d Exceptions to the proposition that the Atmospheric Pressure was greater than the average in months when more than the average number of deaths from Rheumatism occurred, and vice versa.

Scarlet Fever.—The number of deaths reported to have been caused by this disease in 1879 was 418, or 29 in 1,000 of the deaths from all causes. The largest proportion of deaths was among the males, and more than one-half of the deaths from scarlet fever occurred among children under five years of age. Nine deaths occurred from this cause among persons over 25 years of age, the oldest being over 60.

Exhibit Y shows that the greatest number of deaths from scarlet fever occurred in the first five months of the year; it also contains statements of the coincident atmospheric conditions.

EXHIBIT Y.—SCARLET FEVER.—Deaths returned as having occurred from Scarlet Fever in Michigan during the year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM SCARLET FEVER, GREATEST FIRST.			Deaths from Scarlet Fever, 1879.	Temperature,—F.; Mean of three daily observations,—7 A. M., 2 P.M., and 9 P.M.			Humidity of Atmosphere, Etc.—Monthly Averages.				Ozone,— Relative. Maximum = 10.		Average Pressure of Atmosphere. (Barometer Reduced to 32° Fahr.)	
YEAR, 1879.....	Number.	Per Cent. of Total.	Average Range.			Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one per- son in 24 hours. ^a	Weight, in Troy Ounces, of Vapor Exhaled from Air passages in 24 hours, in excess of vapor inhaled. ^a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.			
			Daily.	From Day to Day, 2 P. M. to 2 P. M.	Average.									
			418	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080
More than the Av. No. of Deaths.	May.....	53	12.68	18.68	21.52	* 58.76	64	3.94	* 2.46	9.22	* 2.79	* 2.68	29.116	
	February.....	49	11.72	11.46	14.79	20.40	92	1.23	.77	10.91	4.54	5.01	29.107	
	April.....	45	10.77	19.08	20.77	44.84	66	2.64	1.65	10.03	* 3.00	4.00	29.050	
	June.....	40	9.57	16.60	19.80	* 66.02	75	5.00	* 3.18	8.50	* 2.43	* 2.03	29.073	
	December.....	40	9.57	8.39	11.00	27.46	80	1.70	1.06	10.62	* 2.97	3.87	29.032	
	January.....	38	9.09	13.39	14.63	19.19	89	1.31	.82	10.86	4.00	4.48	29.130	
Average.....			35	8.37	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080
Less than the Av. No. of Deaths.	March.....	34	8.13	12.74	15.65	* 83.19	78	1.93	* 1.21	10.47	* 3.93	* 4.30	29.102	
	November.....	29	6.94	10.87	12.67	* 38.22	75	2.46	* 1.54	10.14	* 3.53	* 4.63	29.027	
	September.....	24	5.74	16.13	18.30	56.21	78	4.40	2.75	8.93	2.87	2.53	29.152	
	July.....	23	5.50	16.81	18.90	74.03	71	6.30	3.94	7.74	2.90	2.13	29.057	
	October.....	23	5.50	15.23	17.90	57.28	76	4.61	2.88	8.80	* 3.32	2.81	29.160	
	August.....	20	4.79	19.06	20.90	70.00	70	5.58	3.49	8.19	2.58	1.76	29.100	

* See foot-notes to Exhibit K, page 260.

^a Includes 3 deaths from Scarlet Rash.

* Exceptions to the proposition that *more* than an average number of deaths occurred in months in which the temperature was *less* than the average, and *vice versa*.

^a Exceptions to the proposition that *more* than an average number of deaths occurred in months in which *less* than the average quantity of vapor was inhaled, and *vice versa*.

* Exceptions to the proposition that *more* than an average number of deaths occurred in months in which the Ozone was *more* abundant than the average, and *vice versa*.

Consumption.—There were one thousand six hundred and seventy-nine deaths from consumption returned for 1879,—767 males and 912 females. The ratio of deaths of females to males from this cause is even considerably larger than the numbers mentioned represent, because of the excess of the male over the female population in Michigan. In-door occupation, and the absence of the necessary consideration of ventilation, probably accounts for a certain portion of the excess of deaths among the females from this cause.

EXHIBIT N.—CONSUMPTION.—*By Sex, the Number of Deaths Returned as having occurred in Michigan from Consumption during the Year 1879, by Months Equalized to Uniform length of 30.44 days each; also the Average Number per Month. (Deaths in unknown month excluded.)*

SEX.	TOTAL.	DEATHS FROM CONSUMPTION IN 1879, BY MONTHS OF EQUAL LENGTH.												Monthly Av.
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Total....	* 1,679	116	119	138	143	139	114	146	147	164	143	145	167	139.92
Males....	767	68	57	58	70	60	59	68	65	68	62	63	71	63.92
Females.	912	50	62	78	73	79	55	78	82	96	81	82	96	76.00

* Excluding 3—3 males and 1 female—in unknown month; 1 female lost, and including 3 gained in equalizing.

EXHIBIT O.—CONSUMPTION.—Deaths Returned as having occurred from Consumption in Michigan during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUM- BER OF DEATHS FROM CONSUMPTION, GREATEST FIRST.			Deaths from Con- sumption, 1879.		Temperature,—Fahr.; Mean of Three Daily Observations,— 7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmosphere, Etc.,—Monthly Averages.				Ozone,— Relative. Maximum = 10.		Average Pressure of Atmosphere. (Barometer Reduced to 32° Fahr.)
Year, 1879.....	Number.	Per Cent. of Total.	Average Range.			Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Va- por in Cubic Foot of Air. ^a	Weight, in Troy Ounces, of Vapor Inhaled by one per- son in 24 hours. ^a	Weight, in Troy Ounces, of Vapor Exhaled from Air passages in 24 hours in excess of vapor inhaled. ^a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.			
			Daily.	Average.										
				From Day to Day, 2 P. M. to 2 P. M.	Average.									
1,677	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080			
More than the Average Number of Deaths.	Dec.....	170	10.14	8.39	11.00	b 27.46	80	1.70	c 1.06	10.62	2.97	3.87	29.032	
	Sept.....	162	9.66	16.13	18.30	56.21	78	4.40	2.75	8.93	2.87	2.53	29.152	
	Aug.....	150	8.94	19.06	20.90	70.00	70	5.53	3.49	8.19	2.58	1.76	29.100	
	July.....	148	8.83	16.81	18.90	74.03	71	6.30	3.94	7.74	2.90	2.13	29.057	
	Oct.....	145	8.64	15.23	17.90	57.28	76	4.61	2.88	8.80	3.32	2.81	29.160	
	Nov.....	143	8.53	10.87	12.67	b 38.22	75	2.46	c 1.54	10.14	3.53	4.63	29.027	
	April.....	141	8.41	19.03	20.77	b 44.84	66	2.64	c 1.63	10.03	3.00	4.00	29.050	
May.....	141	8.41	18.68	21.32	58.76	64	3.94	2.46	9.22	2.79	2.68	29.116		
Average.....	140	8.35	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080		
Less than Av. No. of Deaths.	March.....	133	8.23	12.74	15.63	33.19	78	1.93	1.21	10.47	3.93	4.30	29.102	
	Jan.....	118	7.03	13.39	14.65	19.19	89	1.31	.82	10.86	4.00	4.48	29.130	
	June.....	112	6.68	16.60	19.80	b 66.02	75	5.09	c 3.18	8.50	2.43	2.03	29.073	
	Feb.....	109	6.50	11.46	14.79	20.40	92	1.23	.77	10.91	4.54	5.01	29.107	

^a See foot-note to Exhibit K, page 260.

^b Exceptions to the proposition that the Temperature was *higher* than the average in months when *more* than the average number of deaths from Consumption occurred, and *vice versa*.

^c Exceptions to the proposition that *more* than an average amount of vapor was inhaled in months in which there was *more* than the average number of deaths from Consumption, and *vice versa*.

Pneumonia.—Exhibits 18, P; and 17, and Diagram No. 9 will enable the reader to determine many interesting facts for comparison, in relation to pneumonia as a cause of death. The largest number of deaths from this cause occurred in the months of March and April.

EXHIBIT 18.—PNEUMONIA.—Deaths Returned as having Occurred in Michigan from Pneumonia in February and March of each of the Years 1874–1879, the Average for the Six Years ending with 1879, and some coincident Meteorological conditions, at the Agricultural College, Michigan.

FEBRUARY AND MARCH OF EACH OF THE YEARS 1874-1879.			Number of Deaths from Pneu- monia.	Temperature,—F.; Mean of 3 Daily Ob- servations—7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmosphere, Etc.,— Monthly Averages.			Ozone,— Relative. Maximum = 10.		Rain and Melted Snow, in Inches.	Pressure of Atmosphere. Inches of Mercury. (Reduced to 32° F.)		
				Average Range.		Average.	Relative Humidity, or Per Cent. of Satur- ation.	Weight, in Grains, of Vapor, in Cubic Foot of Air. ^a	Day, —7 A. M. to 2 P. M.	Night, —9 P. M. to 7 A. M.	Range of Barometer.		Average Pressure.		
				Daily.	From Day to Day, 2 P. M. to 2 P. M.						Monthly.			Average, Daily.	
Average	February...	75	15.14	17.83	22.81	89	1.44	4.92	5.79	1.527	1.076	.157	28.977		
	March.....	92	14.18	16.73	30.09	84	1.81	4.72	5.75	1.732	1.176	.172	28.943		
1874.....	February...	57	c 13.32	e 14.07	g 25.51	89	1.55	5.53	6.10	1.550	1.357	.171	28.928		
	March.....	108	13.52	16.45	32.30	83	1 2.00	n 5.00	p 6.00	1.786	1.091	.133	28.895		
1875.....	February...	116	20.14	21.57	g 8.35	1 94	.73	m 5.78	o 6.57	2.198	1.231	.206	28.875		
	March.....	128	15.48	16.68	h 26.20	1 87	1.63	n 5.70	p 6.19	1.020	1.231	.163	28.844		
1876.....	February...	71	c 12.76	e 16.66	g 27.38	1 81	1.59	5.76	7.27	3.040	1.033	.176	29.063		
	March.....	107	12.84	14.39	30.55	1 95	1.78	n 6.06	p 7.00	4.840	1.812	.223	28.929		
1877.....	February...	56	c 14.79	e 17.71	g 32.31	1 85	1.85	m 4.54	o 4.14	.000	1.007	.122	29.124		
	March.....	64	15.29	17.29	24.51	91	1 1.53	5.29	6.06	.560	1.119	.151	28.981		
1878.....	February...	37	c 14.59	e 15.93	g 28.07	89	1.91	5.00	5.33	2.740	1.033	.123	29.026		
	March.....	59	d 12.06	16.77	h 40.90	1 83	2.80	n 4.68	p 4.94	.312	.942	.181	29.027		
1879.....	February...	92	11.46	14.79	g 20.40	1 92	1.23	4.54	5.01	1.430	.964	.151	29.107		
	March.....	114	12.74	15.65	33.19	78	1 1.93	3.93	4.30	1.570	.796	.137	29.102		

^a See foot notes to Exhibit K, page 260.

^c Four out of six cases in which the Average Daily Range of Temperature and the deaths were both *less* than the average.

^d One out of six cases in which the Average Daily Range of Temperature and the deaths were both *less* than the average.

^e Four out of six cases in which the Range of Temperature "from day to day" and the deaths were both *less* than the average.

^f Six out of six cases in which the Average Temperature was *higher* and the deaths *less* than the average, or *vice versa*.

^h Two out of six cases in which the Average Temperature was *higher* and the deaths *less* than the average, or *vice versa*.

ⁱ Four out of six cases in which the Relative Humidity and the deaths were both *less* than the average, or both *greater* than the average.

^j Three out of six cases in which the Relative Humidity and the deaths were both *less* than the average, or both *greater* than the average.

^k Three out of six cases in which the Absolute Humidity and the deaths were both *greater* than the average, or both *less* than the average.

^m Two out of six cases in which the Day Ozone and the deaths were both *less* than the average, or both *greater* than the average.

ⁿ Four out of six cases in which the Day Ozone and the deaths were both *less* than the average, or both *greater* than the average.

^o Three out of six cases in which the Night Ozone and the deaths were both *less* than the average, or both *greater* than the average.

^p Four out of six cases in which the Night Ozone and the deaths were both *less* than the average, or both *greater* than the average.

^q Two out of six cases in which the Pressure of the Atmosphere and the deaths were both *less* than the average, or both *greater* than the average.

^r One out of six cases in which the Pressure of the Atmosphere and the deaths were both *less* than the average, or both *greater* than the average.

EXHIBIT P.—PNEUMONIA.—Deaths returned as having occurred from Pneumonia, in Michigan during the Year 1879, and some coincident Meteorological conditions.

MONTHS IN ORDER BY NUMBER OF DEATHS FROM PNEUMONIA, GREATEST FIRST.			Deaths from Pneumo- nia, 1879.		Temperature,—Fahr.; Mean of Three Daily Observations,—7 A. M., 2 P. M., and 9 P. M.			Humidity of Atmosphere, Etc.,—Monthly Averages.				Ozone,— Relative. Maximum = 10.		Average Pressure of Atmosphere. (Barometer Reduced to 32° Fahr.)
Year, 1879.....	Number.	Per Cent. of Total.	Average Range.			Relative Humidity, or Per Cent. of Saturation.	Weight, in Grains, of Vapor in Cubic Foot of Air.*	Weight, in Troy Ounces, of Vapor Inhaled by one per- son in 24 hours.*	Weight, in Troy Ounces, of Vapor Exhaled from Air passages in 24 hours, in excess of vapor inhaled.*	Day,—7 A. M. to 2 P. M.	Night,—9 P. M. to 7 A. M.			
			Daily.	From Day to Day,— 2 P. M. to 2 P. M.								Average.		
Year, 1879.....	700	100.00	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080		
More than Av. No. of Deaths.	March.....	114	16.29	12.74	15.65	33.19	78	1.93	1.21	10.47	3.93	4.30	29.102	
	April.....	102	14.57	19.03	20.77	44.84	66	2.64	1.65	10.03	d 3.00	4.00	e 29.050	
	February.....	92	13.14	11.46	14.79	20.40	92	1.23	.77	10.91	4.54	5.01	29.107	
	December.....	80	11.43	8.39	11.00	27.46	80	1.70	1.06	10.62	d 2.97	3.87	e 29.032	
	May.....	59	8.43	18.68	21.52	b 58.76	64	3.94	e 2.46	9.22	d 2.79	d 2.68	29.116	
Average.....	58	8.29	14.87	17.24	46.88	76	3.43	2.14	9.54	3.24	3.36	29.080		
Less than the Average No. of Deaths.	November.....	45	6.43	10.87	12.67	b 38.22	75	2.46	e 1.54	10.14	d 3.53	d 4.63	29.027	
	January.....	44	6.28	13.39	14.65	b 19.19	89	1.31	e .82	10.86	d 4.00	d 4.48	e 29.130	
	September.....	42	6.00	16.13	18.30	56.21	78	4.40	2.75	8.93	2.87	2.53	* 29.152	
	June.....	36	5.14	16.60	19.80	66.02	75	5.09	3.18	8.50	2.43	2.03	29.073	
	August.....	31	4.43	19.06	20.90	70.00	70	5.58	3.49	8.19	2.58	1.76	e 29.100	
	July.....	30	4.29	16.81	18.90	74.03	71	6.30	3.94	7.74	2.90	2.13	29.057	
	October.....	25	3.57	15.23	17.90	57.28	76	4.61	2.88	8.80	d 3.32	2.81	e 29.160	

^a See foot-notes to Exhibit K, page 260.

^b Exceptions to the proposition that the Temperature was *greater* than the average in months when *less* than the average number of deaths from Pneumonia occurred, and *vice versa*.

^c Exceptions to the proposition that *more* than an average amount of vapor was inhaled in months when *less* than the average number of deaths from Pneumonia occurred, and *vice versa*.

^d Exceptions to the proposition that the Ozone was *more* than the average in months when *more* than the average number of deaths from Pneumonia occurred, and *vice versa*.

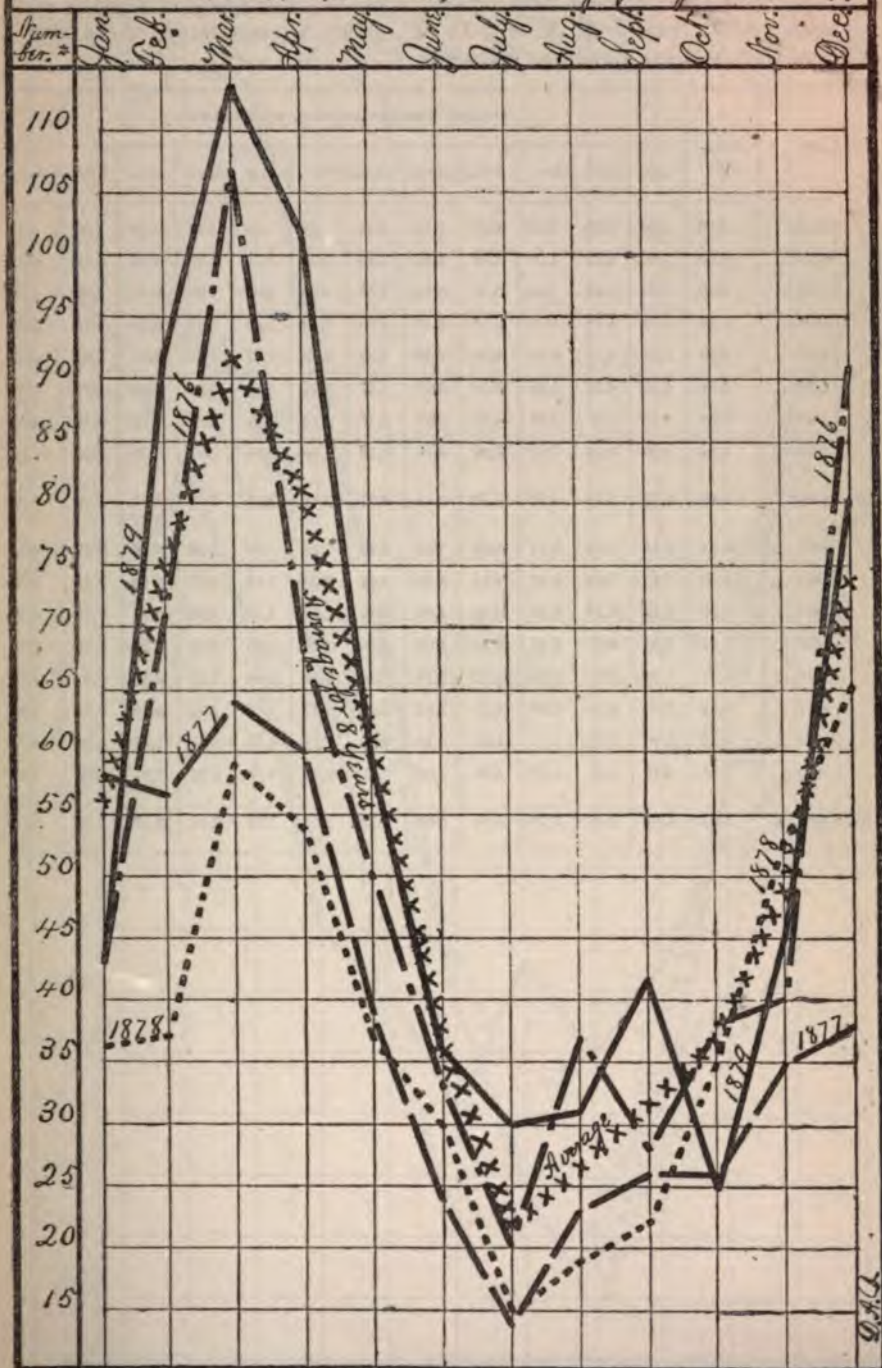
^e Exceptions to the proposition that the Atmospheric Pressure was *greater* than the average in months when *more* than the average number of deaths from Pneumonia occurred, and *vice versa*.

EXHIBIT 17.—PNEUMONIA.—*By Months, the Number of Deaths Returned as having occurred from Pneumonia, in Michigan, during each of the Years 1872-1879, and the average for Eight Years ending with 1879.*

YEARS.	TOTALS.	DEATHS FROM PNEUMONIA, 1872-1879.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
1872.....	641	46	64	75	79	53	23	26	31	29	56	63	89	2
1873.....	706	84	110	80	58	65	55	20	29	34	37	65	68	1
1874.....	800	49	57	108	141	103	46	29	32	46	39	50	93	2
1875.....	745	85	116	128	88	78	36	21	17	31	42	41	65	2
1876.....	637	43	71	107	68	50	33	20	37	28	38	40	91	1
1877.....	465	58	56	64	60	39	24	14	23	26	26	25	38	2
1878.....	462	36	37	59	54	37	30	15	19	22	35	53	65	.....
1879.....	701	44	92	114	102	59	36	30	31	42	25	45	80	1
Av. for 8 y'rs	643	56	75	92	81	61	36	22	27	32	37	49	74	1

Diagram No. 9.

Deaths Returned as having occurred in Michigan from Pneumonia in 1876, 1877, 1878, and 1879, and Average for 8 years, 1872-1879.



* Scale = 15.5 to the inch.

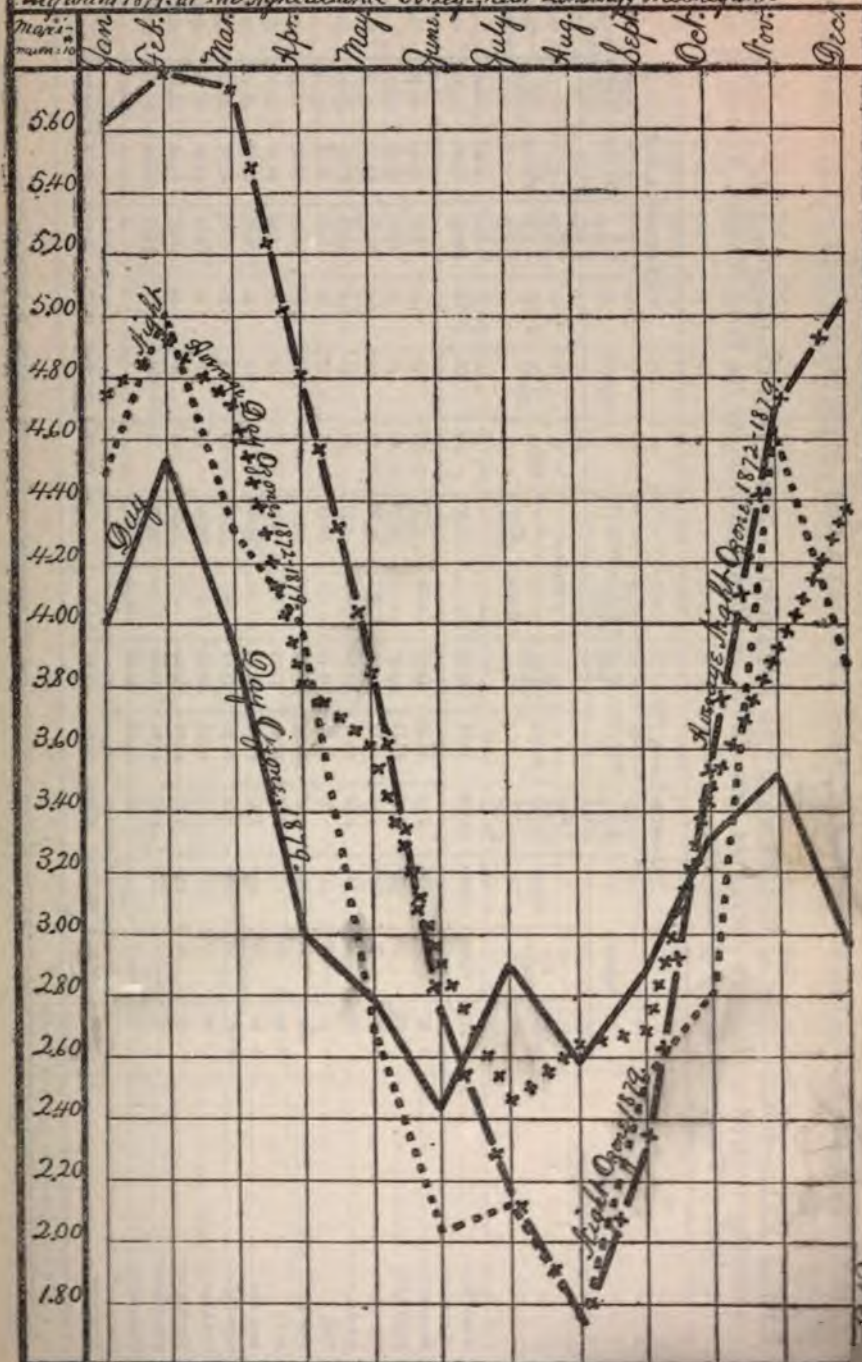
Designed by Henry C. Baker.

EXHIBIT 20—*Relative Amount of Ozone in Air from 9 P. M. to 7 A. M.,—Night Observations,—by Months, during the Years 1872–1879, and the Average for 8 years ending with 1879; also, the Average for 8 years ending with 1879, from 7 A. M. to 2 P. M.,—Day Observations, at the Agricultural College, near Lansing, Michigan.*

YEARS.		Annual Aver- age.	OZONE OBSERVATIONS, BY MONTHS.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Day	1872....	2.82	4.50	4.00	3.00	2.63	2.14	1.91	.88	.98	1.40	1.93	4.60	5.81
	1873....	4.02	5.06	4.21	4.09	3.76	4.58	3.26	3.59	3.55	2.30	4.52	4.30	4.97
	1874....	4.10	5.10	5.53	5.00	5.70	5.80	3.50	1.80	2.80	2.90	3.32	3.80	4.00
	1875....	4.53	5.52	5.78	5.70	3.73	3.19	3.96	3.52	3.50	4.30	5.30	4.90	5.00
	1876....	3.68	5.32	5.76	6.06	3.70	3.10	1.87	2.16	1.97	2.60	3.45	3.57	4.57
	1877....	3.66	4.87	4.54	5.29	3.70	3.29	3.17	2.71	3.42	2.93	3.20	3.60	3.17
	1878....	3.50	3.74	5.00	4.68	4.37	3.97	3.17	2.10	2.32	2.23	2.71	3.17	4.55
	1879....	3.24	4.00	4.54	3.93	3.00	2.79	2.43	2.90	2.58	2.87	3.32	3.53	2.97
Av. for 8 years..		3.69	4.76	4.92	4.72	3.82	3.61	2.91	2.46	2.64	2.69	3.47	3.93	4.38
Night	1872....	4.24	5.44	6.00	5.71	5.30	3.84	3.23	2.28	.99	1.86	3.18	6.17	6.84
	1873....	4.63	6.32	5.93	5.80	4.27	4.59	2.66	3.06	2.65	4.27	4.69	5.47	5.89
	1874....	3.99	6.39	6.10	6.00	6.60	4.90	2.34	1.50	1.10	1.20	3.01	4.50	4.20
	1875....	5.04	5.93	6.57	6.19	3.96	4.03	3.66	3.22	3.70	3.68	6.20	6.60	6.70
	1876....	4.11	6.90	7.27	7.00	5.53	4.13	2.27	1.58	1.26	1.73	3.48	3.33	4.61
	1877....	3.33	5.03	4.14	6.06	4.27	2.94	2.90	1.77	1.08	1.53	3.10	3.73	3.37
	1878....	3.42	4.48	5.33	4.94	4.53	4.10	3.00	1.74	1.52	1.60	1.97	3.14	4.74
	1879....	3.36	4.48	5.01	4.30	4.00	2.68	2.03	2.13	1.76	2.53	2.81	4.63	3.57
Av. for 8 years.		4.02	5.62	5.79	5.75	4.81	3.90	2.76	2.16	1.75	2.30	3.57	4.70	5.05

Diagram No. 10.

Relative Amount of Open in Air, from 9 P.M. to 7 A.M. - Night Observations - and from 7 A.M. to 2 P.M. - Day Observations - in 1879, and the Average for 3 years ending with 1879, at the Agricultural College, near Lansing, Michigan.



* Scale = 62 to the inch.

Designed

Baker

CORRELATION OF CONSUMPTION AND PNEUMONIA.

These two diseases may be studied together in Tables XXII. and XXIII., pages 282 and 283, by sex, by months, and by periods of age.

TABLE XXII.—CORRELATION OF CONSUMPTION AND PNEUMONIA.—Deaths from Consumption and Pneumonia Returned as having occurred in Michigan during the Year 1879, by Months, Exhibiting the Total Number, Number of each Sex, Per Cent. of Total, and Excess of each Sex.

MONTHS, 1879.	CONSUMPTION, 1879.										PNEUMONIA, 1879.									
	Number.				Per Cent. of each Sex to Total of both Sexes.				Number.				Per Cent. of each Sex to Total of both Sexes.							
	Males.		Fe-males.		Total.	Per Cent. of deaths in each Month to Total for Year.	Males.		Fe-males.		Total.	Per Cent. of deaths in each Month to Total for Year.	Males.		Fe-males.		Total.	Per Cent. of deaths in each Month to Total for Year.		
	Males.	Fe-males.	Males.	Fe-males.			Males.	Fe-males.	Males.	Fe-males.			Males.	Fe-males.	Males.	Fe-males.				
Year, 1879.....	767	913	1,680	100.00	45.65	54.35	8.70	13.56	.....	.....	402	299	701	100.00	57.35	42.65	14.70	.....	.....
January.....	b 67	51	118	7.02	56.78	43.22	.....	.....	.....	.....	b 25	19	44	6.28	56.82	43.18	13.64	.....	.....
February.....	b 52	57	109	6.49	47.71	52.29	.....	.....	.....	.....	b 46	46	92	13.12	50.00	50.00	.....	.....	.....
March.....	b 50	79	128	8.21	42.75	57.25	.....	.....	.....	.....	b 61	50	111	16.26	56.14	43.86	12.28	.....	.....
April.....	69	72	141	8.39	48.94	51.06	e	2.12	.....	.....	61	39	102	14.55	62.75	37.25	25.50	e	.....
May.....	61	80	141	8.39	43.26	56.74	.....	.....	.....	.....	27	32	59	8.42	45.76	54.24	.....	.....	8.18
June.....	58	54	112	6.67	51.79	48.21	.....	.....	.....	.....	19	17	36	5.14	52.78	47.22	5.56	.....	.....
July.....	b 69	79	148	8.81	46.62	53.38	e	6.76	.....	.....	b 17	13	30	4.23	56.67	43.33	13.34	e	.....
August.....	b 66	84	150	8.93	44.00	56.00	e	12.00	e	.....	b 17	14	31	4.42	54.84	45.16	9.68	e	.....
September.....	b 67	95	162	9.64	41.36	58.64	e	17.28	e	.....	b 28	14	42	5.99	66.67	33.33	33.34	e	.....
October.....	63	82	145	8.63	43.45	56.55	e	13.10	e	.....	16	9	25	3.67	64.00	36.00	28.00	e	.....
November.....	62	91	153	8.51	43.36	56.64	e	13.28	e	.....	29	16	45	6.42	64.44	35.56	28.88	e	.....
December.....	72	98	170	10.12	42.35	57.65	e	15.30	e	.....	50	30	80	11.41	62.50	37.50	25.00	e	.....
Unknown.....	2	1	3	.18	66.67	33.33	33.34	1	1	2	.14	100.00	100.00
Average.....	63.75	75.00	139.75	8.32	46.03	53.97	33.50	24.83	58.33	8.32	57.78	42.22

* Excluding deaths in unknown month.

b Less than the average number of deaths from Consumption, and more than the average number from Pneumonia, and vice versa.

c Eight out of twelve months in which there was an excess of deaths of one sex from consumption and of the opposite sex from pneumonia.

TABLE XXIII.—CORRELATION OF CONSUMPTION AND PNEUMONIA.—Exhibiting the Number and Per Cent. of Deaths of each Sex, the difference between the Sexes, and the Per Cent. of Total Deaths at each Period of Age from Consumption and Pneumonia, in Michigan, during the Year 1879.

AGES IN PERIODS OF YEARS, 1879.	CONSUMPTION, 1879.										PNEUMONIA, 1879.											
	NUMBER.					PER CENT. OF THE SEXES.					NUMBER.					PER CENT. OF THE SEXES.						
	Males.		Fe-males.		Total.	Per Ct. of Deaths at Each Age to All Ages.	Males.		Fe-males.		Excess.	Males.		Fe-males.		Total.	Per Ct. of Deaths at Each Age to All Ages.	Males.		Fe-males.		Excess.
All Ages, 1879.....	767	913	1,680	100.00	45.65	51.35	8.70	402	299	701	100.00	57.35	42.65	14.70	.....	.....	.....	.....	.....	.....	.....	.....
Under 5.....	a 41	54	95	b 5.65	43.16	56.84	c	13.68	a 194	135	b 3.29	58.97	41.03	17.94	c	.....	.....	.....	.....	.....	.....	.....
5 to 10.....	9	18	27	1.07	50.00	50.00	.....	.....	17	11	28	3.59	60.71	39.29	21.42	.....	.....	.....	.....	.....	.....	.....
10 to 15.....	11	25	36	2.14	30.56	69.44	.....	.....	28.88	4	8	1.71	33.33	66.67	.....	.....	.....	.....	.....	.....	.....	.....
15 to 20.....	a 39	107	166	b 9.88	35.54	64.46	.....	.....	28.92	a 10	12	b 3.14	45.45	54.55	.....	.....	.....	.....	.....	.....	.....	.....
20 to 25.....	a 87	159	b 246	b 14.64	35.37	64.63	c	.....	29.25	a 12	7	b 3.71	63.16	36.84	26.32	c	.....	.....	.....	.....	.....	.....
25 to 30.....	a 71	124	b 195	b 11.61	36.41	63.59	.....	.....	27.13	a 10	11	b 3.00	47.62	52.38	.....	.....	.....	.....	.....	.....	.....	.....
30 to 35.....	a 76	93	b 169	b 10.06	44.97	55.03	c	.....	10.06	a 12	8	b 2.85	60.00	40.00	.....	.....	.....	.....	.....	.....	.....	.....
35 to 40.....	a 58	80	b 138	b 8.21	42.03	57.97	.....	.....	15.94	a 11	11	b 2.2	50.00	50.00	.....	.....	.....	.....	.....	.....	.....	.....
40 to 45.....	a 63	41	b 104	b 6.19	60.58	39.42	21.16	.....	.....	a 17	10	b 27	3.85	62.96	37.04	25.92	.....	.....	.....	.....	.....	.....
45 to 50.....	a 48	43	91	5.42	52.75	47.25	5.50	.....	.....	a 18	12	30	4.28	60.00	40.00	20.00	.....	.....	.....	.....	.....	.....
50 to 55.....	a 53	32	85	5.06	62.35	37.65	24.70	.....	.....	a 10	8	18	2.57	53.56	46.44	11.12	.....	.....	.....	.....	.....	.....
55 to 60.....	a 34	23	57	3.09	50.75	49.25	1.50	c	.....	a 14	12	26	3.71	53.85	46.15	7.70	c	.....	.....	.....	.....	.....
60 to 65.....	a 46	36	82	4.88	56.10	43.90	12.20	.....	.....	a 18	8	26	3.71	69.23	30.77	38.46	.....	.....	.....	.....	.....	.....
65 to 70.....	44	29	73	4.35	60.27	39.73	20.54	.....	.....	21	16	37	5.28	56.76	43.24	13.52	.....	.....	.....	.....	.....	.....
70 to 75.....	27	19	46	2.74	53.70	46.30	17.40	c	.....	9	12	22	3.14	45.00	54.55	c	9.55	.....	.....	.....	.....	.....
75 to 80.....	24	16	40	2.38	60.00	40.00	20.00	c	.....	10	14	23	3.28	39.13	60.87	c	21.74	.....	.....	.....	.....	.....
80 and over.....	10	6	15	.89	66.67	33.33	33.34	.....	.....	11	3	14	2.00	78.57	21.43	57.14	.....	.....	.....	.....	.....	.....
Unknown.....	6	8	14	.83	42.86	57.14	c	14.28	4	1	5	.71	80.00	20.00	60.00	c	.....	.....	.....	.....	.....	.....
Average.....	44.76	53.24	98.00	5.83	49.78	50.22	.....	23.41	17.53	40.94	5.84	55.31	44.66	.....	.....	.....	.....	.....	.....	.....	.....	.....

^a More than the average number of deaths of males from Consumption, and less than the average number of deaths of males from Pneumonia, and vice versa.
^b More than an average number and per cent. of deaths from Consumption and less than an average number and per cent. of deaths from Pneumonia, and vice versa.
^c More than an average proportion of males from Consumption and less than an average proportion of males from Pneumonia, and vice versa.
^d Of 17 periods of 5 years each, unknown ages excluded.

TABLE XXIV.—*Exhibiting, for the State and Eleven Geographical Divisions in 1879, by Sex, the Number of Deaths Returned as having occurred from All Causes, from Consumption, Pneumonia, Typhoid Fever, Intermittent Fever, and Diarrhea; also, the Per Cent. of Deaths from Consumption, Pneumonia, Typhoid Fever, Intermittent Fever, and Diarrhea, to Deaths from All Causes.*

STATE AND GEOGRAPHICAL DIVISIONS. ^a	SEX.	All Causes, 1879.	CONSUMPTION.		PNEUMONIA.		TYPHOID FEVER.		INTERMIT- TENT FEVER.		DIARRHEA.	
			Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.
STATE..... ^b	Total....	14,407	1,680	11.66	701	4.87	397	2.76	46	.32	226	1.57
	Males....	7,522	767	10.20	402	5.34	190	2.53	18	.24	131	1.74
	Females..	6,848	913	13.33	299	4.37	207	3.02	28	.41	95	1.39
	Unk'n....	37	—	—	—	—	—	—	—	—	—	—
Upper-peninsular....	Total....	672	53	8.63	51	7.59	18	2.68	4	.60	13	1.79
	Males....	375	27	7.20	31	8.27	11	2.93	2	.53	7	1.87
	Females..	296	31	10.47	20	6.76	7	2.36	2	.63	5	1.69
	Unk'n....	1	—	—	—	—	—	—	—	—	—	—
North-western.....	Total....	342	23	6.73	8	2.34	9	2.63	2	.58	7	2.05
	Males....	178	8	4.49	6	3.37	2	1.12	1	.56	4	2.25
	Females..	161	15	9.32	2	1.24	7	4.35	1	.62	3	1.86
	Unk'n....	3	—	—	—	—	—	—	—	—	—	—
Northern.....	Total....	223	31	9.42	5	2.24	1	.45	1	.45	2	.90
	Males....	116	10	8.62	2	1.72	1	.86	—	—	1	.86
	Females..	107	11	10.28	3	2.80	—	—	1	.93	1	.93
North-eastern.....	Total....	172	15	8.72	7	4.07	8	4.65	1	.58	6	3.49
	Males....	102	7	6.86	4	3.92	3	2.94	—	—	2	1.96
	Females..	70	8	11.43	3	4.29	5	7.14	1	1.43	4	5.71
Western.....	Total....	1,725	180	10.43	68	3.94	43	2.43	4	.23	28	1.62
	Males....	922	90	9.76	35	3.80	21	2.28	3	.22	15	1.63
	Females..	802	90	11.22	33	4.11	21	2.62	2	.25	13	1.62
	Unk'n....	1	—	—	—	—	—	—	—	—	—	—
Northern-central...	Total....	348	47	13.51	20	5.75	15	4.31	4	1.15	6	1.71
	Males....	172	22	12.79	12	6.98	8	4.65	1	.58	4	2.33
	Females..	174	25	14.37	8	4.60	7	4.02	3	1.72	2	1.15
	Unk'n....	2	—	—	—	—	—	—	—	—	—	—

^a For counties included in each Division, see page 162.

^b For counties and townships from which no returns of deaths for 1879 were received, see Exhibit H, page 136; for those in which no deaths occurred, see Exhibit I, page 137.

TABLE XXIV.—CONTINUED.

GEOGRAPHICAL DIVISIONS.	SEX.	All Causes, 1879.	CONSUMP- TION.		PNEUMONIA.		TYPHOID FEVER.		INTERMIT- TENT FEVER.		DIARRHEA.	
			Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.
Bay and Eastern.....	Total.....	2,210	233	10.50	136	6.15	46	2.06	12	.54	52	2.35
	Males.....	1,145	113	9.87	85	7.42	27	2.36	8	.28	30	2.62
	Females.....	1,059	119	11.24	51	4.82	19	1.70	9	.85	22	2.08
	Unk'n.....	6	—	—	—	—	—	—	—	—	—	—
Central.....	Total.....	2,180	245	11.24	103	4.72	74	3.39	2	.09	17	.78
	Males.....	1,125	106	9.42	55	4.89	26	2.31	1	.09	13	1.16
	Females.....	1,047	139	13.28	48	4.58	48	4.58	1	.10	4	.38
	Unk'n.....	8	—	—	—	—	—	—	—	—	—	—
South-western.....	Total.....	1,091	135	12.37	59	5.41	43	3.94	2	.18	6	.55
	Males.....	578	59	10.21	34	5.88	22	3.81	1	.17	3	.52
	Females.....	513	76	14.81	25	4.87	21	4.09	1	.19	3	.58
	Unk'n.....	—	—	—	—	—	—	—	—	—	—	—
Southern-central.....	Total.....	2,496	334	13.38	185	5.41	78	3.13	7	.28	16	.64
	Males.....	1,252	135	10.78	73	5.83	38	3.04	3	.24	11	.88
	Females.....	1,232	199	16.15	62	5.03	40	3.25	4	.32	5	.41
	Unk'n.....	12	—	—	—	—	—	—	—	—	—	—
South-eastern.....	Total.....	2,948	390	13.22	109	3.70	63	2.14	7	.24	74	2.51
	Males.....	1,557	190	12.20	65	4.17	31	1.99	4	.26	41	2.63
	Females.....	1,387	200	14.42	44	3.17	32	2.31	3	.22	33	2.38
	Unk'n.....	4	—	—	—	—	—	—	—	—	—	—

* For counties included in each Division, see page 162.

TABLE XXV.—*Exhibiting, for the State, and by Counties, for the Year 1879, the Number of Deaths from All Causes, from Consumption, Pneumonia, Typhoid Fever, Intermittent Fever, and Diarrhea; also the Per Cent. of Deaths from Consumption, Pneumonia, Typhoid Fever, Intermittent Fever, and Diarrhea, to Deaths from All Causes.*

STATE AND COUNTIES.	All Causes, 1879.	CONSUMPTION.		PNEUMONIA.		TYPHOID FEVER.		INT'M'T FEVER.		DIARRHEA.	
		Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.
State.....	14,407	1,630	11.66	701	4.87	397	2.76	46	.32	226	1.57
Alcona.....	27	2	7.41	2	7.41	3	11.11				
Allegan.....	323	37	11.49	26	8.07	17	5.28	1	.31	4	1.24
Alpena.....	63	6	9.52	2	3.17	2	3.17			5	7.94
Antrim.....	43	3	6.98								
Baraga.....	20	3	15.00							1	5.00
Barry.....	168	19	11.31	6	3.57	6	3.57				
Bay.....	363	48	13.22	17	4.63	3	.83	4	1.10	10	2.75
Benzie.....	32	1	3.13							1	3.13
Berrien.....	344	53	15.41	15	4.36	8	2.33			1	.29
Branch.....	241	32	13.28	11	4.56	3	1.24			2	.83
Oakhoun.....	296	36	12.16	18	6.08	19	6.42	1	.34	1	.34
Cass.....	178	16	8.43	6	3.37	4	2.25			1	.56
Charlevoix.....	40	7	17.50	1	2.50						
Cheboygan.....	42	1	2.38	2	4.76					1	2.38
Chippewa.....	52	9	17.31	2	3.85	2	3.85				
Clare.....	30	4	13.33			1	3.33	1	3.33		
Clinton.....	213	27	12.68	8	3.76	6	2.82				
Crawford.....	7										
Delta.....	30	1	3.33	8	26.67					1	3.33
Eaton.....	312	36	11.54	14	4.49	7	2.24			4	1.28
Emmet.....	64	7	10.94	1	1.56			1	1.56		
Genesee.....	278	30	10.79	12	4.32	11	3.96			1	.36
Gladwin.....	8	1	12.50								
G. Traverse.....	60	4	6.67			1	1.67				
Gratiot.....	170	19	11.18	11	6.47	9	5.29			3	1.76
Hillsdale.....	251	36	14.34	7	2.79	4	1.59	1	.40		
Houghton.....	224	10	4.46	14	6.25	9	4.02	4	1.79	7	3.13
Huron.....	99	4	4.04	5	5.05	2	2.02			5	5.05
Ingham.....	288	35	12.15	9	3.18	8	2.78			1	.35
Ionia.....	206	20	9.71	9	4.37	10	4.85			3	1.46
Iosco.....	58	7	12.07	3	5.17	3	5.17				
Isabella.....	98	14	14.29	6	6.12	3	3.06	1	1.03		
Isle Royal.....											
Jackson.....	337	42	12.46	17	5.04	8	2.37	1	.39	2	.59
Kalamazoo.....	365	55	15.07	25	6.85	7	1.92	1	.27	1	.27
Kalkaska.....	17	2	11.76			1	5.88			1	5.88
Kent.....	796	88	11.06	30	3.77	16	2.01	2	.25	11	1.38
Keweenaw.....	49	3	6.12	3	6.12						
Lake.....	16	1	6.25								
Lapeer.....	251	23	9.16	14	5.58	9	3.59	1	.40	3	1.20
Leelanaw.....	41	7	17.07	2	4.88						
Lenawee.....	392	54	13.78	19	4.85	16	4.08			1	.26

^a Except townships not represented by returns of deaths in 1879, see Exhibit H, page 126.
^b No returns from county clerk to State Department.

TABLE XXV.—CONTINUED.

COUNTIES.	All Causes, 1879.	CONSUMPTION.		PNEUMONIA.		TYPHOID FEVER.		INT'M'NT FEVER.		DIARRHEA.	
		Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.	Number of Deaths.	Per Cent. to Deaths from All Causes.
Livingston..	176	22	12.50	8	4.55	2	1.14	1	.57	2	1.14
Mackinac..*	22	8	36.35	—	—	1	4.55	—	—	—	—
Macomb.....	303	48	15.58	6	1.95	14	4.55	—	—	10	3.25
Manistee.....	119	8	6.72	4	3.36	4	3.36	2	1.68	3	2.52
Manitou.....*	6	—	—	—	—	—	—	—	—	—	—
Marquette....	217	20	9.22	18	8.29	6	2.76	—	—	1	.46
Mason	87	4	4.60	2	2.30	1	1.15	—	—	—	—
Mecosta	141	20	14.18	5	3.55	8	5.67	—	—	5	3.55
Menominee..*	26	—	—	—	—	—	—	—	—	—	—
Midland.....	64	8	12.50	6	9.38	3	4.69	2	3.13	1	1.56
Missaukee....	17	—	—	2	11.76	2	1.18	—	—	—	—
Monroe.....	333	45	13.51	16	4.80	5	1.50	4	1.20	2	.60
Montcalm..*	204	9	4.41	13	6.37	7	3.43	—	—	1	.49
Muskegon ..*	214	18	8.41	10	4.67	2	.93	—	—	7	3.27
Newaygo....	101	14	13.86	7	6.93	3	2.97	—	—	—	—
Oakland.....	356	45	12.64	17	4.78	8	2.25	1	.28	1	.28
Oceana.....	97	10	10.31	2	2.06	7	7.22	1	1.03	—	—
Ogemaw.....	5	—	—	—	—	—	—	1	20.00	—	—
Ontonagon....	29	4	13.79	1	3.45	—	—	—	—	—	—
Osceola.....	96	6	6.25	4	4.17	—	—	—	—	1	1.04
Otsego.....*	10	1	10.00	1	10.00	—	—	—	—	—	—
Ottawa.....	318	39	12.26	13	4.09	13	4.09	1	.31	9	2.83
Presque Isle..*	19	—	—	—	—	—	—	—	—	1	5.26
Roscommon..*	7	—	—	3	4.29	—	—	—	—	—	—
Saginaw.....	702	69	9.83	35	4.99	17	2.42	3	.43	25	3.56
Sanilac.....	199	29	14.57	8	4.02	5	2.51	1	.50	5	2.51
Schoolcraft..*	3	—	—	—	—	—	—	—	—	2	66.67
Shiawassee..	165	28	16.97	13	7.83	8	4.85	1	.61	2	1.21
St. Clair.....	368	43	11.68	40	10.87	9	2.45	—	—	2	.54
St. Joseph....	255	33	12.94	12	4.71	9	3.53	2	.78	5	1.96
Tuscola.....	228	16	7.02	17	7.46	1	.44	3	1.32	2	.88
Van Buren....	247	30	12.15	12	4.86	14	5.67	1	.40	—	—
Washtenawa..	339	46	12.81	26	7.24	12	3.34	1	.28	4	1.11
Wayne.....	1,951	252	12.92	70	3.59	33	1.85	2	.10	61	3.13
Wexford...*	67	3	4.48	—	—	2	2.99	—	—	3	4.48

* Except townships not represented by returns of deaths in 1879, see Exhibit H, page 136.

TABLE XXVI.—*Exhibiting, for the State and Eleven Geographical Divisions of Michigan, by Sex, the Number of Deaths Returned as having occurred during the Year 1879, at All Ages, from Old Age, of All Aged 70 and Over, and of All Aged Under 5; also the Per Cent. of Deaths from Old Age, of All Aged 70 and Over, and of All Aged Under 5, to Deaths at All Ages.*

STATE AND GEOGRAPHICAL DIVISIONS. ^a	SEX.	Deaths at All Ages, 1879.	OLD AGE.		AGED 70 AND OVER.		AGED UNDER 5.	
			Number of Deaths.	Per Cent. to Deaths at All Ages, by Geographical Divisions.	Number of Deaths.	Per Cent. to Deaths at All Ages, by Geographical Divisions.	Number of Deaths.	Per Cent. to Deaths at All Ages, by Geographical Divisions.
STATE.....	Total	14,407	608	4.22	1,535	10.65	5,693	39.52
	Males	7,522	294	3.91	864	11.49	3,111	41.35
	Females	6,848	314	4.59	671	9.80	2,549	37.22
	Unknown	37					33	89.19
Upper-peninsular.....	Total	672	11	1.64	24	3.57	336	50.00
	Males	375	6	1.60	11	2.93	200	53.33
	Females	296	5	1.69	13	4.39	135	52.36
	Unknown	1					1	100.00
North-western.....	Total	342	7	2.05	21	6.14	185	54.09
	Males	178	1	.56	9	5.06	99	55.62
	Females	161	6	3.73	12	7.45	83	51.55
	Unknown	3					3	100.00
Northern	Total	223	2	.90	8	3.59	105	47.08
	Males	116	1	.86	2	1.72	55	47.41
	Females	107	1	.93	6	5.61	50	46.73
North-eastern.....	Total	172	2	1.16	5	2.91	80	46.51
	Males	102	2	1.96	5	4.90	48	47.06
	Females	70					32	45.71
Western	Total	1,725	67	3.88	150	8.70	738	42.73
	Males	922	26	2.82	80	8.68	403	43.71
	Females	802	41	5.11	70	8.73	335	41.77
	Unknown	1						

^a For counties included in each Division, see page 162.

^b For counties and townships from which no returns of deaths in 1879 were received, see Exhibit II, page 136; for those in which no deaths occurred, see Exhibit I, page 137.

TABLE XXVI.—CONTINUED.

GEOGRAPHICAL DIVISIONS.*	SEX.	Deaths at All Ages, 1879.	OLD AGE.		AGED 70 AND OVER.		AGED UNDER 5.	
			Number of Deaths.	Per Cent. to Deaths at All Ages, by Geographical Divisions.	Number of Deaths.	Per Cent. to Deaths at All Ages, by Geographical Divisions.	Number of Deaths.	Per Cent. to Deaths at All Ages, by Geographical Divisions.
Northern-central	Total.....	348	7	2.01	20	5.75	145	42.53
	Males.....	172	2	1.16	9	5.23	78	45.35
	Females.....	174	5	2.87	11	6.32	70	40.23
	Unknown.....	2						
Bay and Eastern	Total.....	2,210	86	3.89	169	7.65	1,031	46.65
	Males.....	1,145	51	4.45	105	9.17	572	49.96
	Females.....	1,065	35	3.31	64	6.04	454	42.87
	Unknown.....	6					5	83.33
Central	Total.....	2,180	90	4.13	242	11.10	801	36.74
	Males.....	1,125	45	4.00	140	12.44	449	39.91
	Females.....	1,047	45	4.30	102	9.74	344	32.86
	Unknown.....	8					8	100.00
South-western	Total.....	1,091	39	3.57	125	11.46	389	35.60
	Males.....	578	22	3.81	78	13.49	212	36.69
	Females.....	513	17	3.31	47	9.16	177	34.50
Southern-central	Total.....	2,496	163	6.53	438	17.55	689	27.60
	Males.....	1,252	78	5.83	235	18.77	361	28.63
	Females.....	1,232	90	7.31	203	16.48	316	25.65
	Unknown.....	12					12	100.00
South-eastern	Total.....	2,948	134	4.55	333	11.30	1,171	39.72
	Males.....	1,557	65	4.17	190	12.20	634	40.72
	Females.....	1,387	69	4.97	143	10.31	533	38.43
	Unknown.....	4					4	100.00

* For counties included in each Division, see page 162.

TABLE XXVII.—*Exhibiting, for the State and Counties of Michigan, the Number of Deaths Returned as having occurred at All Ages, from Old Age, of All Aged 70 and Over, and of All Aged Under 5, in 1879; also the Per Cent. of Deaths from Old Age, of All Aged 70 and Over, and of All Aged under 5 to Deaths at All Ages.*

STATE AND COUNTIES.	ALL AGES.	OLD AGE.		AGED 70 AND OVER.		AGED UNDER 5.	
	Number of Deaths.	Number of Deaths.	Per Ct. to Deaths at All Ages.	Number of Deaths.	Per Ct. to Deaths at All Ages.	Number of Deaths.	Per Ct. to Deaths at All Ages.
STATE	14,407	608	4.22	1,535	10.65	5,693	39.52
Alcona	27	-----	-----	1	3.70	12	4.44
Allegan	322	17	5.28	43	13.35	124	38.51
Alpena	63	-----	-----	2	3.17	32	50.79
Antrim	43	-----	-----	1	2.33	18	41.86
Baraga	20	1	5.00	1	5.00	9	45.00
Barry	168	13	7.74	27	16.07	68	40.48
Bay	363	8	2.20	18	4.96	195	53.73
Benzle	32	1	3.13	3	9.38	16	50.00
Berrien	344	6	1.74	34	9.88	116	33.73
Branch	241	6	2.49	30	12.45	79	32.78
Calhoun	296	17	5.74	55	18.58	68	22.97
Cass	178	9	5.06	20	11.24	61	34.27
Charlevoix	40	-----	-----	-----	-----	19	47.50
Cheboygan	42	2	4.76	3	4.76	19	45.24
Chippewa	52	4	7.69	5	9.62	21	40.38
Clare	30	1	3.33	3	10.00	9	30.00
Clinton	218	9	4.23	24	11.27	51	23.43
Crawford	7	-----	-----	-----	-----	5	71.43
Delta	30	-----	-----	1	3.33	20	66.67
Eaton	312	17	5.45	38	12.18	118	37.82
Emmet	64	-----	-----	3	4.69	32	50.00
Genesee	278	14	5.04	40	14.39	93	33.45
Gladwin	8	-----	-----	-----	-----	2	25.00
Grand Traverse	60	1	1.67	5	8.33	32	53.33
Gratiot	170	7	4.12	13	7.65	73	42.94
Hillsdale	251	16	6.37	32	12.75	65	25.90
Houghton	224	2	.89	4	1.79	131	58.48
Huron	99	4	4.04	7	7.07	49	49.49
Ingham	288	5	1.74	24	8.33	106	36.81
Ionia	206	9	4.37	25	12.14	67	32.52
Iosco	58	-----	-----	-----	-----	25	43.10
Isabella	98	1	1.02	4	4.08	44	44.90
Isle Royal	-----	-----	-----	-----	-----	-----	-----
Jackson	357	26	7.22	52	15.43	118	35.01
Kalamazoo	365	23	6.30	59	16.16	98	26.85
Kalkaska	17	-----	-----	-----	-----	9	52.94
Kent	796	34	4.27	84	10.55	309	38.82
Keweenaw	49	-----	-----	1	2.04	22	44.90
Lake	16	2	12.50	1	6.25	5	31.25
Lapeer	251	18	7.17	28	11.16	93	37.05

^a Except townships not represented by returns of deaths, see Exhibit H, page 136.

^b No returns from county clerk to State Department.

TABLE XXVII.—CONTINUED.

COUNTIES.	ALL AGES.	OLD AGE.		AGED 70 AND OVER.		AGED UNDER 5.	
	Number of Deaths.	Number of Deaths.	Per Ct. to Deaths at All Ages.	Number of Deaths.	Per Ct. to Deaths at All Ages.	Number of Deaths.	Per Ct. to Deaths at All Ages.
Leelanaw.....	41	1	2.44	3	7.32	17	41.46
Lenawee.....	392	36	9.18	91	23.21	99	25.26
Livingston.....	176	5	2.84	21	11.93	48	27.27
Mackinac.....	22	2	9.09	3	13.64	4	18.18
Macomb.....	308	8	2.60	36	11.69	101	32.79
Manistee.....	119	1	8.40	3	2.52	70	58.82
Manitou.....	6	1	16.67	1	16.67	2	33.33
Marquette.....	217	2	9.22	7	3.23	120	55.30
Mason.....	87	4	4.60	6	6.90	50	57.47
Mecosta.....	141	4	2.84	9	6.38	60	42.55
Menominee.....	26					14	53.85
Midland.....	64	1	1.56	4	6.25	31	48.44
Missaukee.....	17					10	58.82
Monroe.....	333	9	2.70	45	13.51	111	33.33
Montcalm.....	204	7	3.43	15	7.35	84	41.18
Muskegon.....	214	2	.93	11	5.14	119	55.61
Newaygo.....	101	5	4.95	6	5.94	35	34.65
Oakland.....	356	27	7.58	79	22.19	89	25.00
Oceana.....	97	2	2.06	6	61.86	40	41.24
Ogemaw.....	5					2	40.00
Ontonagon.....	29			2	6.90	12	41.38
Osceola.....	96	3	3.13	5	5.21	40	52.08
Otsego.....	10			1	10.00	3	30.00
Ottawa.....	318	15	4.72	31	9.75	120	40.58
Presque Isle.....	19	2	10.53	2	10.53	9	47.37
Roscommon.....	7					2	28.57
Saginaw.....	702	24	3.42	42	5.98	335	47.72
Sanilac.....	199	4	2.01	19	9.55	101	50.75
Schoolcraft.....	3					3	100.00
Shiawassee.....	165	4	2.42	15	9.09	58	35.15
St. Clair.....	368	19	5.16	35	9.51	150	40.76
St. Joseph.....	235	11	4.31	41	17.25	69	27.06
Tuscola.....	228	9	3.95	20	8.77	108	47.37
Van Buren.....	247	7	2.83	28	11.34	88	35.63
Washtenaw.....	359	28	7.80	75	20.89	98	27.30
Wayne.....	1,951	90	4.61	173	8.87	870	44.59
Wexford.....	67	2	2.99	6	8.96	38	56.72

* Except townships not represented by returns of deaths, see Exhibit II, page 135.

TABLE XXVIII.—CONTINUED.—Deaths from Consumption, 1879.

MONTHS, 1879.												AGES IN PERIODS OF YEARS,—1879.																					
January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	YEAR, 1879.	CONJUGAL CONDITION.	SEX AND OCCUPATION.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.
17	20	25	27	17	21	27	29	27	30	19	26	..	285	Total.....	CLASS I.	..	..	2	19	36	29	18	17	23	18	16	23	21	17	19	19	6	2
12	13	16	18	12	14	20	16	17	15	8	19	..	180	Married....	Cultivators of the Earth.	..	..	..	4	15	15	10	22	16	13	22	19	13	14	14	2	1	
5	7	6	6	4	7	6	9	7	12	8	4	..	81	Single.....	..	..	2	19	32	13	2	6	1	1	2	..	1	1	1	1	1	..	..
..	..	3	3	1	..	..	3	3	3	3	3	..	22	Widowed..	..	..	..	..	..	1	1	1	..	..	..	1	1	3	4	5	4	1	..
..	..	..	..	..	..	1	1	..	..	..	..	..	2	Unknown..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
3	3	3	2	3	1	4	5	1	1	3	3	..	32	Total.....	CLASS II.	..	..	..	4	1	3	2	6	1	6	1	3	2	2	1	..	..	1
..	2	3	1	2	..	3	4	1	..	3	2	..	21	Married....	Active Mechanics Abroad.	..	..	..	..	..	1	2	5	1	5	1	2	2	1	1	1	..	..
1	..	..	1	1	1	1	..	..	..	..	..	..	5	Single.....	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	1	..	..	..	..	..	1	..	1	..	1	..	6	Widowed..	..	..	..	..	..	..	2	..	1	..	1	1	1	1	1	1	..	..	..
7	4	3	2	7	1	3	4	6	3	..	5	..	45	Total.....	CLASS III.	..	..	..	5	6	5	9	5	7	..	3	4	1	..	..	..	..	..
4	4	1	2	3	1	1	3	4	2	..	5	..	30	Married....	Active Mechanics in Shops.	..	..	..	..	3	4	7	5	5	5	5	3	2	1	..	..	..	..
3	..	1	..	2	..	2	1	1	..	..	..	..	10	Single.....	..	..	..	5	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..
..	..	1	..	2	..	..	..	1	1	..	..	..	5	Widowed..	..	..	..	..	..	..	..	1	..	..	..	2	..	2	..	..	..	..	..
3	2	5	..	7	4	8	2	2	4	3	2	..	42	Total.....	CLASS IV.	..	..	3	8	2	10	3	4	3	3	3	3	3	..	..	..	..	..
2	1	3	..	4	3	3	1	..	1	3	2	..	23	Married....	Inactive Mechanics in Shops.	..	..	..	1	2	7	2	4	1	3	3	..	..	..	..	..	..	..
1	1	2	..	2	1	3	1	2	3	..	..	..	16	Single.....	..	..	..	3	7	..	3	1	..	..	2	..	..	..	..	..	..	..	..
..	..	..	..	1	..	2	..	..	..	..	..	..	3	Widowed..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	8	7	11	8	8	8	4	8	9	14	15	1	107	Total.....	CLASS V.	..	..	1	13	15	11	14	4	4	9	7	4	10	8	2	2	1	2
4	4	1	5	3	4	3	1	3	5	10	5	..	48	Married....	..	..	..	..	1	4	7	4	1	5	4	3	7	6	1	2	1	2	..
9	4	5	5	5	3	3	3	5	3	3	7	1	49	Single.....	Laborers—No Special Trades.	..	..	1	13	13	7	6	3	2	3	2	1	1	1	1	1	..	..
..	..	1	..	..	1	1	..	..	1	1	3	..	3	Widowed..	..	..	..	..	..	..	1	..	..	..	2	1	1	..	..	..	..	..	..

	Single	Married	Total	Widowed	Unknown
Jewelers.	1	0	1	0	0
Printers.	1	0	1	0	0
Saddlors.	1	0	1	0	0
Shoe-cutters.	1	0	1	0	0
Shoemakers.	1	0	1	0	0
Tailors.	1	0	1	0	0
Telegraph Operators.	1	0	1	0	0
Tobacconists.	1	0	1	0	0
CLASS V.	13	15	28	0	0
Housekeepers.	1	0	1	0	0
Laborers.	13	13	26	0	0
Unknown.	2	0	2	0	0

TABLE XXVIII.—CONTINUED.—Deaths from Consumption, 1879.

MONTHS, 1879.												AGES IN PERIODS OF YEARS.—1879.																						
January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	SEX AND OCCUPATION.	CONJUGAL CONDITION.	YEAR, 1879.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
			1	1	1	1							Builders.	3 Total.....	1									2		1								
					1									1 Married...	1								1											
														1 Single.....																				
				1										1 Widowed...																				
			1		2	1				1			Clerks.	8 Total.....	1	3	2					2												
			1											3 Married...			1	1				1												
				1	1					1				5 Single.....			1	2	1			1												
													Confectioners.	1 Married...	1																			
													Druggists.	2 Married...	2								1		1									
													Glass Manufacturers.	1 Married...	1										1									
			1		1								Grocers.	3 Total.....	3							1												
														2 Married...	2																			
					1									1 Single.....	1																			
													Grocery Clerks.	1 Single.....	1																			
													Hotel-keepers.	2 Married...	2																			
													Landlords.	1 Married...	1																			
													Merchants.	13 Total.....	13					2	4				3	1	1	1	1	1	1			
														9 Married...	9						1	4			1		1	1	1	1	1	1		
														4 Single.....	4							1			2									
													Money-lenders.	1 Widowed...	1																			

CAUSES OF DEATH,—CONSUMPTION.

[illegible]

EXHIBIT Q.—*The Average Age of the Inhabitants of Michigan, of both Sexes, of each Sex, and the difference between the Sexes, for All Living June 1, 1870, and All Returned as having Died during the Year ending June 1, 1870, as Compiled from the U. S. Census of that date; for All Returned as having Died from Consumption during the Years 1870 to 1879, inclusive, for all returned as having died from All Causes during the years 1870 to 1879, inclusive; as shown by the Registration Returns; for All Living Aged 20 and Over as per Census June 1, 1870; for All Aged 20 and Over whose Ages and Occupations were stated in the Registration Returns of Deaths for the Years 1870 to 1879, inclusive, and for the Native and Foreign-born Inhabitants Returned as having Died during the Years 1873 to 1879, inclusive.*

	YEAR ENDING:	AVERAGE AGE IN YEARS AND HUNDRETHS OF A YEAR.			
		Total.	Males.	Fe- males.	Excess, Males.
Deaths, as per Census.....	June 1, 1870.	24.79	25.17	24.39	.78
Living, as per Census.....		24.32	24.91	23.63	1.22
All Living aged 20 and over, per Census.....		33.23	33.61	32.80	.81
Deaths, as shown by Registration Returns.....	Dec. 31, 1870.	23.50	24.05	22.89	1.16
Deaths from Consumption, by Registration Returns.....		34.95	36.89	33.14	3.75
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		51.01	52.45	49.56	2.89
"Average years of life" after the age of 20 years, as shown by Table VII., page 197, Report for 1872, plus 20 years,—indicating the "Average Age at Death" of all who died aged 20 years and over according to that Life Table.....			63.72	62.02	1.70
Deaths, as shown by Registration Returns.....	Dec. 31, 1871.	25.63	26.78	24.50	2.28
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		51.44	52.79	46.45	6.34
Deaths, as shown by Registration Returns.....	Dec. 31, 1872.	24.17	25.69	23.17	2.52
Deaths from Consumption, by Registration Returns.....		35.05	39.10	31.19	7.91
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		50.73	51.90	47.08	4.82
All who died aged 20 years and over, as shown by Regis- tration Returns.....		49.72	51.67	47.42	4.25
Deaths, as shown by Registration Returns.....	Dec. 31, 1873.	31.20	31.25	30.14	1.11
Deaths of Native-born Inhabitants, as shown by Regis- tration Returns.....		27.25	27.76	26.71	1.05
Deaths of Foreign-born Inhabitants, as shown by Regis- tration Returns.....		43.87	40.68	42.35	-1.67
Deaths from Consumption, by Registration Returns.....		37.81	40.20	35.77	4.43
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		50.17	56.51	49.27	7.24
All who died aged 20 years and over, as shown by Regis- tration Returns.....		49.67	51.48	47.66	3.82
Deaths, as shown by Registration Returns.....	Dec. 31, 1874.	25.33	25.78	24.09	1.69
Deaths of Native-born Inhabitants, as shown by Regis- tration Returns.....		20.26	23.99	20.25	3.74
Deaths of Foreign-born Inhabitants, as shown by Regis- tration Returns.....		47.15	47.99	46.13	1.86
Deaths from Consumption, by Registration Returns.....		36.48	39.90	33.44	6.46
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		50.77	52.70	48.23	4.47
All who died aged 20 years and over, as shown by Regis- tration Returns.....		50.89	52.84	48.72	4.12
Deaths, as shown by Registration Returns.....	Dec. 31, 1875.	25.32	26.31	24.36	1.95
Deaths of Native-born Inhabitants, as shown by Regis- tration Returns.....		20.17	20.73	19.88	.85
Deaths of Foreign-born Inhabitants, as shown by Regis- tration Returns.....		46.90	48.68	44.49	4.19
Deaths from Consumption, by Registration Returns.....		35.77	38.19	33.55	4.64
All aged 20 and over, whose Occupations were stated in Registration Returns of Deaths.....		51.07	53.29	47.87	5.42
All who died aged 20 years and over, as shown by Regis- tration Returns.....		50.65	52.79	48.06	4.73
Deaths of Native-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		50.68	53.66	47.61	6.05
Deaths of Foreign-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		50.77	52.37	48.54	3.83

EXHIBIT Q.—CONTINUED.

	YEAR ENDING:	AVERAGE AGE IN YEARS AND HUNDREDTHS OF A YEAR.			
		Total.	Males.	Fe- males.	Excess, Males.
Deaths, as shown by Registration Returns.....	Dec. 31, 1876.	25.83	26.79	25.04	1.75
Deaths of Native-born Inhabitants, as shown by Registration Returns.....		20.86	21.34	20.60	.74
Deaths of Foreign-born Inhabitants, as shown by Registration Returns.....		47.33	48.91	46.68	2.23
Deaths from Consumption, by Registration Returns.....		33.70	40.20	33.40	6.80
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		51.93	54.00	49.89	4.11
All who died aged 20 years and over, as shown by Registration Returns.....		51.94	53.91	49.88	4.03
Deaths of Native-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		51.09	54.46	48.92	5.54
Deaths of Foreign-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		52.25	53.70	51.96	1.74
Deaths, as shown by Registration Returns.....	Dec. 31, 1877.	25.89	26.44	25.44	1.00
Deaths of Native-born Inhabitants, as shown by Registration Returns.....		20.30	20.22	20.57	-.35
Deaths of Foreign-born Inhabitants, as shown by Registration Returns.....		49.31	50.31	48.00	2.31
Deaths from Consumption, by Registration Returns.....		39.34	39.42	33.94	5.48
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		51.71	53.89	49.55	4.34
All who died aged 20 years and over, as shown by Registration Returns.....		51.88	54.03	49.65	4.38
Deaths of Native-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		51.25	54.13	48.43	5.70
Deaths of Foreign-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		53.01	53.95	51.78	2.17
Deaths, as shown by Registration Returns.....	Dec. 31, 1878.	26.41	26.99	25.99	1.00
Deaths of Native-born Inhabitants, as shown by Registration Returns.....		20.74	21.20	21.10	.10
Deaths of Foreign-born Inhabitants, as shown by Registration Returns.....		49.75	50.96	48.85	2.11
Deaths from Consumption, by Registration Returns.....		36.67	40.95	33.23	7.70
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		52.45	54.21	50.41	3.80
All who died aged 20 years and over, as shown by Registration Returns.....		52.40	54.17	50.57	3.60
Deaths of Native-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		51.01	54.20	49.57	4.63
Deaths of Foreign-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		53.84	54.88	53.15	1.73
Deaths, as shown by Registration Returns.....	Dec. 31, 1879.	25.76	26.31	25.28	1.03
Deaths of Native-born Inhabitants, as shown by Registration Returns.....		20.07	19.94	20.32	-.38
Deaths of Foreign-born Inhabitants, as shown by Registration Returns.....		49.55	49.21	47.17	2.04
Deaths from Consumption, by Registration Returns.....		35.99	39.30	33.12	6.18
All aged 20 and over whose occupations were stated in Registration Returns of Deaths.....		52.29	54.73	49.42	5.31
All who died aged 20 years and over, as shown by Registration Returns.....		52.46	54.67	50.05	4.62
Deaths of Native-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		51.24	54.19	48.43	5.76
Deaths of Foreign-born Inhabitants aged 20 years and over, as shown by Registration Returns.....		54.23	52.76	52.86	-.10

TABLE XXIX.—*Exhibiting, for Decedents Aged 20 Years and Over, in 1879, by Classified Occupations, the Number and the Aggregate and Average Ages of All returned, of All whose Occupations and Ages were returned, and of All whose Occupations were not Specified, One-half of a Year added to Age of each Person in place of Months and Days excluded.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
	ALL AGED 20 YEARS AND OVER.....	6,407	335,181.50	52.31
	ALL SPECIFIED OCCUPATIONS,—AGED 20 YEARS AND OVER.....	5,739	300,119.50	52.29
	OCCUPATIONS UNSPECIFIED,—AGED 20 YEARS AND OVER...	668	35,062.00	52.49
I.	CULTIVATORS OF THE EARTH.....	1,592	94,430.00	59.32
II.	ACTIVE MECHANICS ABROAD.....	150	8,228.00	54.85
III.	ACTIVE MECHANICS IN SHOPS.....	214	11,288.50	52.75
IV.	INACTIVE MECHANICS IN SHOPS.....	114	5,581.50	48.96
V.	LABORERS,—NO SPECIAL TRADES.....	478	22,492.00	47.53
VI.	AGENTS, LABORERS ABROAD, ETC.....	126	5,650.50	44.85
VII.	SEAFARING MEN.....	40	1,655.00	41.38
VIII.	SOLDIERS.....	4	195.00	48.75
IX.	BUSINESS MEN.....	202	9,609.50	48.02
X.	PROFESSIONAL MEN.....	95	5,182.50	54.55
XI.	UNEMPLOYED.....	94	5,489.50	58.40
XII.	FEMALES.....	2,635	130,227.50	49.42
I.	CULTIVATORS OF THE EARTH.....	1,592	94,430.00	59.32
	Farmers.....	1,570	93,180.00	59.35
	Farmers' Sons.....	2	45.00	22.50
	Farm Laborers.....	4	221.00	55.25
	Fruit-growers.....	2	106.00	53.00
	Gardeners.....	12	729.00	61.50
	Retired Farmers.....	2	139.00	69.50
II.	ACTIVE MECHANICS ABROAD.....	150	8,228.00	54.85
	Brick-masons.....	1	40.50	40.50
	Carpenters.....	95	5,263.00	55.50
	Joiners.....	3	143.00	47.67
	Masons.....	23	1,322.00	57.48
	Painters.....	17	729.00	42.88
	Pavers.....	1	72.50	72.50
	Ship-builders.....	2	118.00	59.00
	Ship-carpenters.....	4	240.00	60.00
	Stone-masons.....	4	280.00	70.00

TABLE XXIX.—CONTINUED.—*Occupations of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
III.	ACTIVE MECHANICS IN SHOPS.....	214	11,288.50	52.75
	Bakers.....	7	404.00	57.79
	Blacksmiths.....	31	1,849.00	59.65
	Boiler-makers.....	1	23.50	23.50
	Brewers.....	4	172.00	43.00
	Brick-makers.....	1	31.50	31.50
	Cabinet-makers.....	13	655.00	50.38
	Car-builders.....	1	51.50	51.50
	Cart-menders.....	1	50.50	50.50
	Carriage-makers.....	1	78.50	78.50
	Carriage Trimmers.....	1	37.50	37.50
	Chair-weavers.....	1	20.50	20.50
	Cooks.....	7	470.00	67.14
	Coopers.....	20	1,190.00	59.50
	Coppersmiths.....	2	82.00	41.00
	Engineers.....	20	805.00	40.25
	File-cutters.....	1	22.50	22.50
	Finishers.....	1	22.50	22.50
	Foundrymen.....	1	69.50	69.50
	Glass-manufacturers.....	1	64.50	64.50
	Gunsmiths.....	4	262.00	65.50
	Horseshoers.....	1	38.50	38.50
	Machinists.....	17	802.00	47.18
	Marble-cutters.....	1	36.50	36.50
	Mechanics.....	19	1,033.00	54.37
	Millers.....	20	1,133.00	56.65
	Millwrights.....	2	136.00	68.00
	Molders.....	6	191.00	31.83
	Organ-builders.....	1	39.50	39.50
	Pattern-makers.....	1	31.50	31.50
	Picture-frame Makers.....	1	75.50	75.50
	Plasterers.....	1	39.50	39.50
	Polishers.....	1	28.50	28.50
	Potters.....	1	79.50	79.50
	Sash-makers.....	1	69.50	69.50
	Sawyers.....	2	108.00	54.00
	Shingle-sawyers.....	1	22.50	22.50
	Stone-cutters.....	2	91.00	45.50
	Tanners.....	1	59.50	59.50

TABLE XXIX.—CONTINUED.—*Occupations of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
III.	ACTIVE MECHANICS IN SHOPS.—(Continued.)			
	Tinsmiths.....	3	139.00	46.33
	Upholsterers.....	2	60.00	30.00
	Wagon-makers.....	8	483.00	60.38
	Weavers.....	2	156.00	78.00
	Wheelwrights.....	1	74.50	74.50
IV.	INACTIVE MECHANICS IN SHOPS.....	114	5,581.50	48.96
	Barbers.....	4	165.00	41.25
	Cigar-makers.....	7	239.00	34.14
	Clock-makers.....	1	48.50	48.50
	Gilders.....	2	76.00	38.00
	Harness-makers.....	9	387.00	43.00
	House-workers.....	1	46.50	46.50
	Jewelers.....	3	137.00	45.67
	Printers.....	10	861.00	86.00
	Saddlers.....	1	42.50	42.50
	Shirt-makers.....	1	39.50	39.50
	Shoe-cutters.....	1	23.50	23.50
	Shoe-makers.....	40	2,344.00	58.60
	Spinners.....	1	59.50	59.50
	Tailors.....	24	1,201.00	50.04
	Telegraph Operators.....	4	114.00	28.50
	Tobacconists.....	4	224.00	56.00
	Watch-makers.....	1	73.50	73.50
V.	LABORERS—NO SPECIAL TRADES.....	473	22,492.00	47.55
	Domestics.....	1	49.50	49.50
	Firemen.....	3	84.00	28.00
	Housekeepers.....	2	143.00	71.50
	Janitors.....	2	118.00	59.00
	Laborers.....	404	19,317.00	47.81
	"Lime stone".....	1	42.50	42.50
	Loggers.....	1	59.50	59.50
	Millmen.....	1	32.50	32.50
	Miners.....	54	2,491.00	46.13
	"Pulp Mill".....	1	22.50	22.50
	Servants.....	1	64.50	64.50
	Stove-works Men.....	1	45.50	45.50
	Well-diggers.....	1	21.50	21.50

TABLE XXIX.—CONTINUED.—*Occupations of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
VI.	AGENTS, LABORERS ABROAD, ETC.....	126	5,650.50	44.85
	Agents.....	3	157.00	52.33
	Assistant Yard-masters.....	1	22.50	22.50
	Baggage-masters.....	1	48.50	48.50
	Bar-tenders.....	2	79.00	39.50
	Beer-peddlers.....	1	38.50	38.50
	Book Agents.....	1	50.50	50.50
	Brakemen.....	4	114.00	28.50
	Bridge-builders.....	1	60.50	60.50
	Butchers.....	11	582.00	52.91
	Car-drivers.....	1	49.50	49.50
	Car Inspectors.....	1	31.50	31.50
	Coachmen.....	2	77.00	38.50
	Commercial Travelers.....	3	136.00	45.33
	Conductors.....	3	170.00	56.67
	Constables.....	1	35.50	35.50
	Draymen.....	5	238.00	47.60
	Drovers.....	4	142.00	35.50
	Foremen.....	1	50.50	50.50
	Foremen in Mills.....	1	54.50	54.50
	Foremen of Gas Co's.....	1	48.50	48.50
	Hack-drivers.....	1	29.50	29.50
	Hack-men.....	1	53.50	53.50
	Hostlers.....	2	80.00	40.00
	Hucksters.....	3	124.00	41.33
	Hunters.....	1	67.50	67.50
	Light-keepers.....	1	70.50	70.50
	Livery-stable keepers.....	3	167.00	55.67
	Lumbermen.....	22	944.00	42.91
	Mail-carriers.....	2	89.00	44.00
	Mine Captains.....	1	53.50	53.50
	Musicians.....	1	83.50	83.50
	Overseers in Slave-factories.....	1	35.50	35.50
	Peddlers.....	9	557.00	61.89
	Police-men.....	1	32.50	32.50
	R. R. Conductors.....	2	71.00	35.50
	R. R. Employes.....	4	147.00	36.75
	R. R. Engineers.....	2	71.00	35.50

TABLE XXIX.—CONTINUED.—*Occupations of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
VI.	AGENTS, LABORERS ABROAD, ETC.—(Continued.)			
	Railroading.....	1	30.50	30.50
	R. R. Men.....	4	114.00	28.50
	R. R. Station Agents.....	1	34.50	34.50
	Sheriffs.....	1	23.50	23.50
	Sheriffs' Deputies.....	1	59.50	59.50
	Switchmen.....	1	35.50	35.50
	Teamsters.....	11	435.00	39.55
	Watchmen.....	1	52.50	52.50
VII.	SEAFARING MEN.....	40	1,655.00	41.38
	Captains.....	1	21.50	21.50
	Fishermen.....	10	432.00	43.20
	Lake Captains.....	1	39.50	39.50
	Sailors.....	26	1,071.00	41.19
	Steamboat Captains.....	1	64.50	64.50
	U. S. Navy.....	1	26.50	26.50
VIII.	SOLDIERS.....	4	195.00	48.75
	Soldiers.....	4	195.00	48.75
IX.	BUSINESS MEN.....	202	9,699.50	48.02
	Accountants.....	2	120.00	60.00
	Assistant City Treasurers.....	1	38.50	38.50
	Bankers.....	4	218.00	54.50
	Bankers' Sons.....	1	20.50	20.50
	Book-keepers.....	13	499.00	38.38
	Builders.....	4	195.00	48.75
	Capitalists.....	3	216.00	72.00
	Clerks.....	23	745.00	32.39
	Collectors.....	1	64.50	64.50
	Commission Merchants.....	2	108.00	54.00
	Confectioners.....	2	116.00	58.00
	Contractors.....	4	234.00	58.50
	Coroners.....	1	51.50	51.50
	Custom-house Men.....	1	60.50	60.50
	Dealers.....	1	35.50	35.50
	Dealers in Wood.....	1	27.50	27.50
	Druggists.....	4	181.00	45.25

TABLE XXIX.—CONTINUED.—*Occupations of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
IX.	BUSINESS MEN—(Continued.)			
	Expressmen.....	1	20.50	20.50
	Grocers.....	13	578.00	44.46
	Hardware Merchants.....	2	91.00	45.50
	Hatters.....	1	68.50	68.50
	Hotel Clerks.....	1	36.50	36.50
	Hotel-keepers.....	14	726.00	51.86
	Insurance Agents.....	1	29.50	29.50
	Justices of the Peace.....	3	165.00	55.00
	Landlords.....	1	77.50	77.50
	Manufacturers.....	4	238.00	59.50
	Merchants.....	45	2,261.00	50.24
	Milliners.....	1	66.50	66.50
	Mill-owners.....	1	38.50	38.50
	Money-brokers.....	1	71.50	71.50
	Money-lenders.....	1	67.50	67.50
	Nurserymen.....	2	94.00	47.00
	Postmasters.....	2	62.00	31.00
	Postoffice Clerks.....	1	41.50	41.50
	Produce Dealers.....	2	119.00	59.50
	Public Officers.....	1	68.50	68.50
	Pulp Manufacturers.....	1	22.50	22.50
	R. R. Contractors.....	1	54.50	54.50
	Real Estate Dealers.....	1	63.50	63.50
	Registers of Deeds.....	1	41.50	41.50
	Restaurant Men.....	3	112.00	37.33
	Salesmen.....	3	139.00	46.00
	Saloon-keepers.....	18	888.00	49.33
	Salt and Lumber Manufacturers.....	1	64.50	64.50
	Shingle Manufacturers.....	1	55.50	55.50
	Speculators.....	2	124.00	62.00
	Stage Proprietors.....	1	64.50	64.50
	Superintendents of Poor.....	1	66.50	66.50
	Undertakers.....	1	43.50	43.50
	Vessel-owners.....	2	110.00	55.00
X.	PROFESSIONAL MEN.....	95	5,182.50	54.55
	Actors.....	2	66.00	33.00

TABLE XXIX.—CONTINUED.—*Occupations of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
X.	PROFESSIONAL MEN.—(Continued.)			
	Artists.....	3	122.00	40.67
	Attorneys.....	3	148.00	49.33
	Civil Engineers.....	4	225.00	56.50
	Dentists.....	1	27.50	27.50
	Editors.....	2	82.00	41.00
	Horse Doctors.....	2	136.00	68.00
	Judges of Probate.....	1	65.50	65.50
	Lawyers.....	8	459.00	57.38
	Ministers.....	16	1,045.00	65.31
	Music Teachers.....	2	97.00	48.50
	Physicians.....	29	1,817.00	62.66
	Portrait Artists.....	1	24.50	24.50
	Reporters.....	2	107.00	53.50
	Students.....	7	177.00	25.29
	Surveyors.....	9	189.00	21.00
	Teachers.....	10	414.00	41.40
XI.	UNEMPLOYED.....	94	5,489.50	58.40
	Gentlemen.....	2	122.00	61.00
	Paupers.....	2	97.00	48.50
	Retired.....	4	287.00	71.75
	Tramps.....	1	54.50	54.50
	Unemployed.....	85	4,929.00	57.99
XII.	FEMALES.....	2,635	130,227.50	49.42
	Actresses.....	2	56.00	28.00
	Assistant Light-keepers.....	1	20.50	20.50
	Boarding-house keepers.....	3	173.00	57.67
	"Boarding".....	3	224.00	74.67
	Broom-makers.....	1	58.50	58.50
	Carpenters.....	1	66.50	66.50
	Cigar-makers.....	1	39.50	39.50
	Clerks.....	1	23.50	23.50
	Confectioners.....	1	37.50	37.50
	Domestics.....	141	7,533.00	53.42
	Draughtsmen.....	1	27.50	27.50
	Dress-makers.....	16	499.00	31.19

TABLE XXIX.—CONTINUED.—*Occupation of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100ths.	
			Aggregate.	Average.
XII.	FEMALES—(Continued.)			
	Druggists.....	1	83.50	83.50
	Factory-hands.....	1	20.50	20.50
	Farmers' Daughters.....	11	282.00	25.64
	Farmers' Wives.....	114	5,764.00	50.56
	Farmers.....	142	7,863.00	55.30
	Grocers.....	1	82.50	82.50
	Hose-keepers.....	1	35.50	35.50
	Hotel Cooks.....	1	20.50	20.50
	Hotel-keepers.....	2	72.00	36.00
	Housekeepers.....	620	38,925.00	62.78
	House-maids.....	2	42.00	21.00
	Housewives.....	1,117	46,341.00	41.49
	House-workers.....	79	2,772.00	35.09
	Invalids.....	1	58.50	58.50
	Laborers' Wives.....	1	30.50	30.50
	Laborers.....	14	704.00	50.29
	Landladies.....	1	59.50	59.50
	Laundresses.....	2	111.00	55.50
	Matrons.....	13	769.00	59.15
	Mechanics.....	1	20.50	20.50
	Merchants' Daughters.....	1	20.50	20.50
	Merchants' Wives.....	2	67.00	33.50
	Merchants.....	4	241.00	60.25
	Midwives.....	1	83.50	83.50
	Millers.....	2	110.00	55.00
	Milliners.....	12	409.00	34.08
	Ministers' Wives.....	3	141.00	47.00
	Music Teachers.....	1	22.50	22.50
	Nurses.....	1	72.50	72.50
	Paper Dealers.....	1	21.50	21.50
	Paupers.....	3	144.00	48.00
	Physicians.....	2	126.00	63.00
	Produce Dealers.....	1	73.50	73.50
	Prostitutes.....	3	78.00	26.00
	Retired.....	1	73.50	73.50
	Saloon-keepers.....	1	36.50	36.50

TABLE XXIX.—CONTINUED.—*Occupations of Decedents in 1879.*

CLASS.	OCCUPATIONS,—1879.	Number of Persons.	AGE IN YEARS AND 100THS.	
			Aggregate.	Average.
XII.	FEMALES—(Continued.)			
	"Saw-mill".....	1	47.50	47.50
	Seamstresses.....	14	671.00	47.93
	Servants.....	30	1,142.00	38.07
	Shoe-makers.....	1	78.50	78.50
	Shop-keepers.....	1	38.50	38.50
	Station Agents.....	1	33.50	33.50
	Students.....	1	20.50	20.50
	Tailloresses.....	10	467.00	46.70
	Teachers.....	18	508.00	28.22
	Unemployed.....	203	11,883.00	58.54
	Washers.....	2	58.00	29.00
	Weavers.....	6	384.00	64.00
	Wives.....	11	410.00	37.27

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